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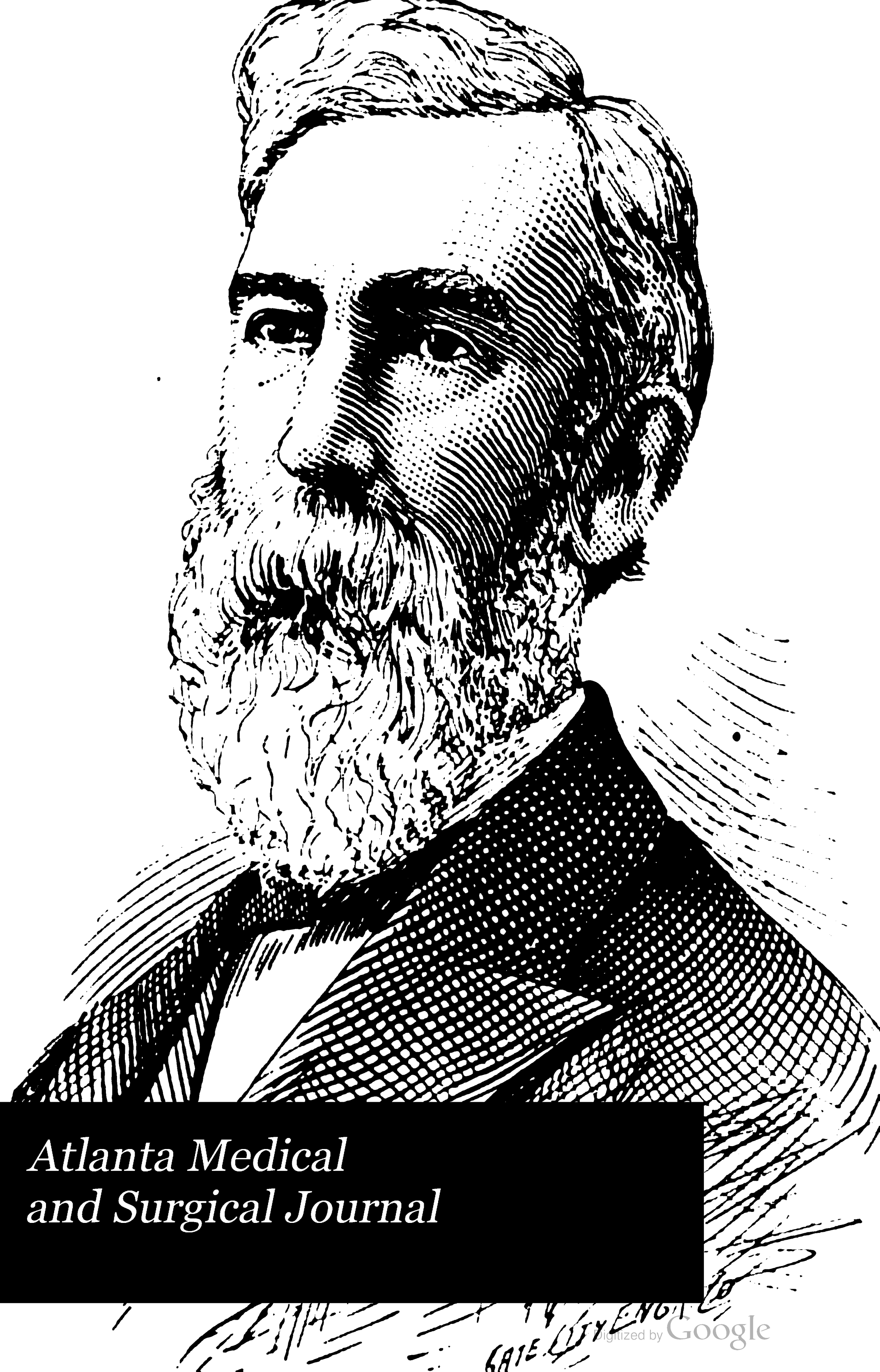

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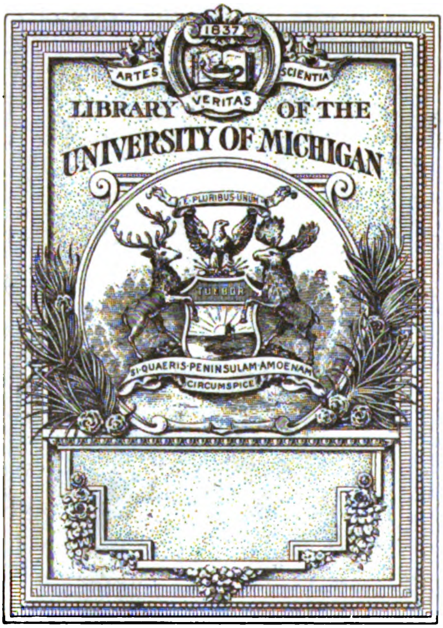
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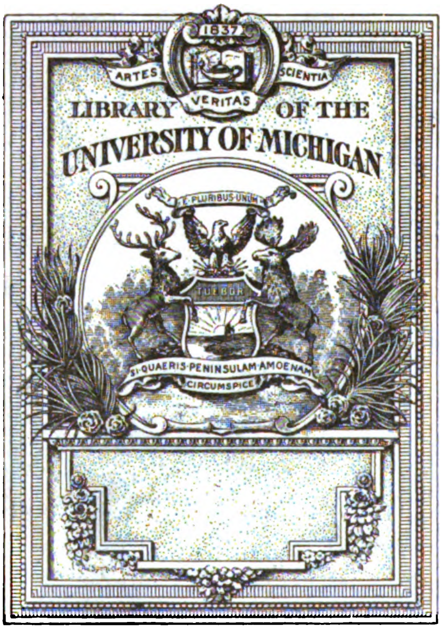
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ORIGINAL COMMUNICATIONS.

PNEUMONIA.*

BY J. C. OLMSTED, M.D.,
ATLANTA, GA.

Definition.—Before entering upon a discussion of the pathology of Pneumonia it would be well, I think, to define what is meant by the term "Pneumonia." By the term Pneumonia, then, I understand to be meant "Acute Lobar" or "Croupous" Pneumonia, as it is sometimes called by our German brethren, or "Pneumonitis," as it is frequently designated, an acute general disease characterized by an inflammation of the vesicular structure of the lungs with an exudation into the alveoli, or air-cells, which renders them impermeable to air, producing a condition called "hepatization"; a single lobe, the whole lung, or both lungs may be simultaneously involved. This definition, which is essentially that of Loomis, is sufficiently clear, and while free from some mooted points, I think expresses well the distinction between this form and the next most common form known as "Broncho" or "Catarrhal Pneumonia," whose pathology is essentially and widely different, as you will remember. Perhaps, as mirroring, in brief space, the current views of advanced medical authors and teachers a few more definitions may not be without interest.

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*Paper read before the Atlanta Society of Medicine, February 4, 1896.

Thus—Prof. Osler says (rather dogmatically, I think), for his definition, "Pneumonia,—an infectious disease, caused by the micrococcus lanceolatus (pneumococcus, diplococcus pneumoniæ), which excites a local inflammation in the lungs, and by its toxins constitutes disturbances of varying intensity. The fever terminates abruptly by crisis; secondary infective processes are common." (In regard to certain portions of this definition I would reply: "highly probable but not proven!" Again, we find in the last edition of "Quain's Dictionary of Medicine" the following more conservative definition: "Pneumonia, an acute disease characterized clinically by sudden onset of severe febrile symptoms, cough, expectoration, and dyspnea, by the physical signs of pulmonary consolidation, and by a rapid abatement of the general symptoms between the fourth and tenth days. Anatomically, it is characterized by an acute inflammation of the lung tissue and by the accumulation of the inflammatory products within the air-cells, which products consist mainly of a fibrinous exudation and leucocytes."

Again I cannot overlook a criticism of that eminently wise and conservatively progressive teacher and writer, the late Dr. Austin Flint. In defining the disease pneumonia, under the head of "Acute Lobar Pneumonia," "Croupous Pneumonia," or "Pneumonitis" (terms which he accepted as conforming to general usage), he yet protests in these words: "These terms are incorrect; all imply that the disease is a purely local inflammation, whereas there are sufficient grounds for regarding it as an essential fever!" Oh! prophetic and wise seer, who in these words has anticipated what will doubtless become the settled faith of modern medical science! These definitions, I believe, fairly express the present attitude of medical opinion, as far as brief definition can. Before passing to the most interesting field of inquiry, the etiology of the disease, a brief summary of the morbid anatomy might be best. Since the time of Laennec pathologists have recognized three "stages" of the inflamed lung, viz.: "Engorgement," "Red Hepatization," and "Gray Hepatization." In the stage of engorgement, the lung is deep red in color, firmer to the touch, and more solid. On section the surface is bathed with blood and serum, it still crepitates (not so distinctly as healthy lung), excised portions float, air-cells can be insufflated from the bronchus, microscopic examination shows great distention of capillary vessels, alveolar epithelium is swollen, and the air-cells are occupied by a variable number of blood corpuscles and detached alveolar cells.

In second stage, "Red Hepatization," lung tissue is solid, firm, airless. On section surface is dry, reddish-brown in color, and very friable, tearing very easily, in marked contrast to healthy lung tissue. Careful inspection shows a granular surface, the granulations representing fibrinous plugs filling air-cells. Smaller branches often contain fibrinous plugs. In the meshes of this coagulated fibrin are found red-blood corpuscles, polynuclear leucocytes, and alveolar epithelium. Alveolar walls are infiltrated with leucocytes; diplococci, staphylococci, and streptococci are also found. In the third stage, "Gray Hepatization," the tissue is changed to a grayish white color, due to the air-cells being densely packed with leucocytes. In this, known as the "Stage of Resolution," disintegration of cells and detritus by fatty degeneration takes place, enabling absorption and elimination to occur. When this course is interrupted, a condition of "purulent infiltration" exists, with the formation of abcesses, such as are found post mortem. At times all three stages of the pneumonic process may be seen in one lung, and the passage from engorgement to "Red" and "Gray Hepatization" distinctly traced. The bronchial mucous membrane is red, rarely swollen; fibrinous casts may be found in them. The bronchial glands are swollen and may be soft and pulpy. When the lung is superficially involved, the pleural surface shows a thin sheet of exudate, giving turbidity to that membrane.

Lesions of other Organs.—The heart is distended with firm tenacious coagula. Right chamber is markedly distended. The spleen is enlarged, kidneys show parenchymatous swelling and turbidity of cortex, with at times interstitial changes. Pericarditis is not infrequent; five in one hundred cases (Osler). Endocarditis more frequent; sixteen in one hundred cases (Osler). Meningitis is not infrequent. Croupous or diphtheritic inflammation of the colon and other parts has been observed. The liver shows parenchymatous changes and engorgement of veins.

We will now consider the *etiology* of this, which is one of the most widespread of acute diseases.

We find that of predisposing causes age ranks first. Prevailing at all ages, there are yet three marked periods: early childhood, then from twenty to forty years, and lastly in old age, of which it is the especial enemy; and according to Loomis, after the age of sixty, nine-tenths of the deaths from acute diseases are due to pneumonia. While catarrhal pneumonia is more common than croupous pneumonia in young children, yet the latter is also found in them, and, according to Loomis, it is five times more frequent in the first two years of existence than in the following eighteen. Males are more frequently affected than females, as being subject to more exposure, for in advanced age, when the conditions of living are more nearly the same, the proportion is about equal. Dwellers in cities, and especially in crowded and unhygienic surroundings, those exposed to hardship and the vicissitudes of weather, are more liable to the disease.

Alcoholism is a most potent predisposing cause. Chronic diseases, such as diabetes, Bright's and others, previous attacks of pneumonia; in short, all debilitating influences exercise a marked effect as "predisposing causes." Pneumonia following blows on the chest, and other traumatism, is known as "Contusion, or Traumatic Pneumonia," and the injury producing it is simply a predisposing cause.

No acute disease recurs with such frequency as Pneumonia. Twenty-nine recurrent attacks are mentioned by Loomis, and ten by Osler, in one individual. The influence of cold as the most potent cause of this disease, and its prevalence during the winter months, has been urged by the supporters of the "purely local inflammation" theory. Now, the disease is almost unknown in the Arctic regions, and statistics show that the continuously cold months give the lowest death-rate, while the spring months, with their sudden and marked changes of temperature, give the highest.

Thus, while not denying the profound effect of sudden chilling of the body, it appears that marked vicissitudes of weather are more active as a predisposing cause than the influence of mere cold. And again we find such diseases as cerebro-spinal meningitis, diphtheria, influenza, measles, etc., more prevalent in the winter months, and yet cold is not ascribed as their cause on that account. It is perhaps at this point that it may be well to consider the reasons for regarding Pneumonia as an infectious disease of the type of the essential fevers. The literature of the past ten years is richer in the development of facts and experimental investigation than all the conturies which have preceded; and the recent experiments, combined with modern statistics, the results of the microscope, and pathological histology, give Croupous Pneumonia a separate and distinct place in the list of pulmonary diseases. The old pathology, which assumed the disease to be a "*purely localized* inflammation of the lungs," and the constitutional symptoms as secondary to this, is no longer tenable. Pneumonia is now almost universally regarded as an infectious disease of the type of the essential fevers, with characteristic local manifestations and lesions in the lung. The disease appears to be caused by certain micro-organisms, or bacteria (more or less satisfactorily demonstrated to be always present in post mortem examinations), and the infection of the organism by germs which is favored by many different conditions, many of which have already been described under the head of "predisposing causes," and which may be summed up as, any or all causes which tend to lessen the vital forces and weaken the powers of resistance.

These germs, or bacteria, which appear to be innocuous under conditions of perfect health, develop and manifest their power when they find a proper soil (so to speak) prepared for them in the lessened vital resistance of the organism. Reasons for regarding the disease as an infectious one, resembling the essential fevers (and by the term infectious is not meant infection in the sense of contagion from individual to individual), may be briefly summed up as follows: First, like most infectious diseases, it runs a definite, self-limited course. Secondly, the relation between the inflammatory process in the lung and the constitutional symptoms is far from uniform. The fever and other signs of infection may, and do often, precede the local affection, and, as a rule, the fever vanishes before there has been demonstrable diminution of the pulmonary inflammation. Again, the constitutional symptoms may be of the severest type when the amount of lung tissue involved is small; and on the other hand, the course of the disease may be benign when an entire lobe or lung is consolidated. Such facts as these are not explained satisfactorily, on the theory that the general symptoms are secondary and dependent upon the local inflammation, for it is contrary to our experience in all other purely inflammatory processes. Thirdly, another proof of the infectious nature of the disease, is that at times it prevails in epidemic form, numerous examples from prisons and barracks having been given, and one remarkable epidemic at Middleburgh, a town in England, where in 1888, out of a population of 70,000, there were 369 deaths. Some village epidemics have indeed been remarkable, resembling contagious diseases in their wide range. Again, it acts primarily upon the nervous system, shown frequently at the outset in young children by convulsions, and in the aged by delirium and coma passing into death. The delirium often present, and the disturbance of the vaso-motor system is very marked. Like other infectious diseases, it has its complications, such as peri- and endocarditis, and derangement of the kidneys, liver, and other organs. Fourth. Fraenkel, and others following him, claims to have found a micro-organism, known as the "Diplococcus of Fraenkel,"* to be most commonly present in the inflamed lung."

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*SPECIAL NOTE.—The diplococcus pneumonia of Fraenkel is identical with the micrococcus which Sternberg and Pasteur found in the saliva of certain persons, and which produces septicemia in the rabbit. This is the most constant organism found in pneumonia, occurring also in the secondary processes of the diseases such as pleursy, endocarditis pericarditis and meningitis. In ten cases observed in the Pathological Laboratory of "Johns Hopkins University," it was present in all. In six of them as pure cultures, and in four associated with pus organisms. It is present also in the sputa of pneumonic cases. It is elliptical in form, lance-shaped, occurring in pairs, hence the name "Diplococcus." It may attack other parts, such as the meninges in cerebro-spinal meningitis, independent of inflammation of the lung. Most interesting and suggestive, are recent experiments in Leyden's Clinic, made by the Klemperer Brothers, on the production of immunity and upon the cure of pneumonia. Immunity was readily obtained in animals by either subcutaneous or intravenous injections of quantities of the filtered bouillon cultures, or glycerine extract. Immunity rarely lasted more than six months, and was transmitted to offspring born within this period. More interesting yet were their experiments on the cure of the artificially produced disease. Fluids and serum of an animal rendered immune not only produced immunity when injected into another animal, but actually cured the disease after injection had been in progress for some time. The temperature fell from 104° Fahrenheit and 105.6° Fahrenheit to normal in 24 hours

Friedlander also has his name associated with one of the bacteria. While again the streptococcus pyogenes, staphylococcus aureus and albus, only have been found. It is therefore evident that cases which do not depart clinically or anatomically from types of pneumonia may be associated with different species of organisms. The present views concerning the bacteriology of pneumonia may be summed up in the conclusions of Sturges and Coupland. (1) Pneumonia is a specific general disease of which lobar inflammation of the lung is the local manifestation. (2) The most constant cause of pneumonia is Fraenkel's diplococcus, but there are other viruses which may evoke it. (3) Chill and other causes, some more or less distinctly observed in their relation to the cause, are to be regarded as only secondary or predisposing causes. It would then appear, I think, that while the bulk of evidence points to bacteriological origin of the disease, it is but fair to say of the particular bacilli described, that their rôle as the causative agents of this disease has not up to the present date reached the position of a clear and undoubted demonstration; and we must yet hold the special forms, under judgment, subject to further experimentation and verification, while holding to the infectious and general, or constitutional nature of this disease in contradistinction to the old "localized inflammation" theory. Nor is it unimportant that we should make this distinction, and have clear views as to its being a general constitutional disease, for the practical question of treatment is pregnant with results either good or bad, according to the conceptions of the disease which hold. Remembering that the disease is self-limited and that its tendency is usually toward recovery,

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They believe that the pneumococcus produces a poisonous albumin ("Pneumotoxin"), which, introduced into the circulation of an animal, causes elevation of the temperature and subsequent production in the body of a substance "anti-pneumotoxin," which possesses the power of neutralizing the poisonous albumin, which is formed by the bacilli. In man they hold that in pneumonia there is a constant absorption of the poisonous albumin produced by the bacteria in the lungs. This continues until the same antidotal substance is produced in the circulation that has been seen to accrue experimentally. It is then that the "crisis" occurs. Bacteria are not destroyed, nor is their power to produce the poisonous albumin lessened, but the latter is neutralized by the third factor, or "anti-pneumotoxin" element. He demonstrated that the serum of the blood after "crisis" in patients, contained this antitoxic substance, which cured infected animals when injected. They also reduced the "crisis" in six patients, by injecting the serum of convalescent patients, which contained this substance, or "antitoxin." The general results of their experimental work have been confirmed by others, but up to the present date no satisfactory progress has been made in establishing a rational serum therapy for the disease in man.

that its chief danger is from heart failure and not apnea, our efforts will be directed to supporting the vital powers, and sustaining the heart, while abstaining from all debilitating measures and remedies which will depress its power. The heart, as you know, while suffering with the other tissues from the very high febrile temperature, has a burden put upon it of twofold character; it has to force blood through an obstructed lung and is obliged to increase its beats in order to aërate the blood in the limited portion it may be of unobstructed lung, this making up by rapid action or movement of the blood, for the lost extent of lung surface for oxygenation under the old plan of cutting short the inflammation; the lancet, tartar emetic, and later veratrum were invoked as "specifics." It is not for me to here discuss the question of treatment; that has been left for abler hands; but I would remark that the testimony from past experience in the treatment of pneumonia, and the discarding of these depressing agents, points to the practical abandonment of the old "localized inflammation" theory; whatever of utility they may have had in the past, they no longer possess.

As the great Trousseau (one of those dead but sceptered sovereigns who yet rule our spirits from their urns) once said:

"The medical or epidemic constitution changes at different periods." By "epidemic or medical constitution," he meant the reaction of a people to disease, and hence to medical remedies. Without going into his masterly disquisition upon this subject, I would say, that the generations which stood the heroic bleedings, drenchings with tartar emetic, and pint doses of veratrum, were not the same people in their constitutional condition, habits of living, etc., as the present generation of very restless individuals, all nervous system, for whom steam, at sixty miles an hour, is too slow traveling, and electricity the only tolerable medium for moving, seeing, and hearing! In conclusion, while awaiting further information as to the precise form of bacteria concerned in the etiology of this disease, I consider myself justified in regarding pneumonia as an acute infectious disease, an essential fever, whose peculiar lesions are found in the lung, as the distinctive lesions of typhoid fever are found in Peyer's patches of the small intestine.

THE TREATMENT OF PNEUMONIA.*

By JAMES B. BAIRD, M.D.,
ATLANTA, GA.

The preponderance of evidence seems to sustain the view that acute lobar pneumonia is a general infectious disease, dependent for its production upon a specific causative agent, with a local expression represented by an exudative inflammation of the pulmonary parenchyma, rather than a local inflammatory lesion with associated symptomatic phenomena.

The natural history of this affection establishes the fact that it is a self-limited disease and, in uncomplicated cases, under favorable conditions, tends toward recovery.

If these propositions are accepted, the study of the therapeutics of pneumonia is simplified, and the indications for treatment are more easily read aright.

It is doubtful if we possess an abortive remedy. Half a century ago when active antiphlogistic doctrines were held in high esteem, general blood-letting was thought to possess no abortive influence, and this measure was assiduously employed.

It is now generally, perhaps universally, conceded that venesection is not abortive or curative and that even as a mere palliative the range of its usefulness is extremely limited.

During the first stage of an attack, in a robust, so-called plethoric subject, suffering from distressing dyspnea, with a full, bounding pulse and excessive pyrexia, the moderate abstraction of blood from the arm is admissible, and it affords immediate relief from the painful symptoms, both by a reduction of the total volume of blood and by removing the disturbing pressure from the overcharged lungs and from an overburdened heart.

The objections to its use relate to its spoliative effect upon the vital fluid in a disease which, in tedious, intense, or unfavorable cases, tends to destroy life by asthenia. The remarkable and perhaps too radical change which has taken place in respect to this measure of treatment within the last fifty or sixty years is not explained by any change in the type of disease, but rather by increased knowledge and by the possession of new therapeutic resources, which, while they do not act so promptly, accomplish with a little delay, practically the same results without any ulterior damaging consequences to the vital forces.

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*Paper read before Atlanta Society of Medicine, Tuesday, February 4th.

It is perhaps proper to state that in an active practice covering a period of twenty-five years, with a fair opportunity for observation and experience, I have never met with a case in which I considered blood-letting necessary or desirable.

It is always difficult to correctly estimate the value of preventive medication, but trustworthy testimony ascribes to quinine the power to arrest a certain proportion of cases of acute lobar pneumonia if administered in full doses early in the first stage. Thus used the remedy possesses the negative merit of being innocuous, even should it fail to meet sanguine expectations.

In the management of pneumonia it is profitable to bear in mind the trite maxim, that the patient and not the disease should be treated. So, with this restraining influence at hand, the resources of our art may best be adapted to the variable and the varying conditions of the patient.

The general indications call for the internal and the external use of remedies, for the relief of pain, allaying cough, reducing pyrexia, procuring rest, sustaining the vital forces, and establishing a tolerance of the disease.

These indications, it will be observed, are based upon the prominent symptoms of the disease, and it is therefore, to the symptoms that our treatment should be addressed, for it must be admitted that, in the present state of our knowledge, we have no specific remedy capable of aborting, arresting, or abridging the attack. The treatment is consequently, for the most part, expectant, but let it be distinctly understood that this term is not synonymous with do-nothing; on the contrary, it is not incompatible with the employment of the most energetic and direct measures.

To relieve pain and subdue cough, opium in some form is the most potent remedy. It should be given in such doses and at such intervals as may be requisite to accomplish these objects. In this, as in other inflammatory affections, it is not only palliative, but is positively curative. Without entering into a full review of its mode of action, suffice it to say, that it conserves the powers of life and promotes a tolerance of painful and perturbing disease.

Excessive heat may be combated by the administration of antipyretics and by the external application of cold. These remedies are usually indicated if the temperature reaches 103° Fahrenheit. Of all the antipyretic drugs, I prefer phenacetin. In proper cases I consider its use not only admissible but advisable. I take this position with a full recognition of the fact that it is at variance with opinions and practices of many able men. I believe it can be easily sustained, and some of the arguments urged against the practice appear to me fanciful and purely theoretical. According to my judgment, it is only in cases manifesting marked cardiac depression that it should be withheld. It may then be substituted by the bath, wet pack, or by sponging. If it is not alone effective, it may be supplemented by the sponge bath.

I do not attempt to obtain the antipyretic effect of quinine. If the disease progresses in spite of a few full doses of the drug at the outset, it should be laid aside except in moderate doses. I believe it is often an advantage to exhibit quinine and phenacetin combined, in doses of two or three grains of each, three or four times daily for several days during the acute period of the attack, and for this purpose I prefer the bisulphate to the ordinary sulphate salt.

My experience with the immersion bath, the cold pack, the coils, or the ice bags does not enable me to speak with confidence regarding their utility or their superiority over other means. The popular prejudice against the application of cold in a disease generally supposed to depend upon cold as a causative influence, is worthy of consideration. Sponging, or even partial sponging, of the readily accessible surface of the body with tepid water or alcohol is to be commended and is often surprisingly efficient. I discard the general application of cold water because it is usually disagreeable to the patient and causes more or less shock.

Sound sleep and mental and physical quietude are desirable; and especially during the acute stage, one of the bromides, aided, if necessary by small additions of chloral at night, usually yields happy results.

Judicious support is indispensable. This is accomplished by appropriate alimentation, by stimulants and by cardiac tonics. The food should be for the most part liquid, and of sufficient quantity. Milk, broth, animal essences, and eggs, with some farinaceous articles, should be allowed.

Alcoholic stimulants are indicated in the vast majority of cases. It is a grave mistake to defer their use too long. Recognizing the general tendency of the disease towards an asthenic state, the necessity for their employment may be profitably anticipated, and thus being forewarned our patient may be forearmed. The pulse affords a safe guide to the dose. Both the quality and the frequency of the pulse is to be considered. I usually begin the administration in an adult with half an ounce three or four times daily in milk or water, and, noting the effect, gradually or promptly increase the amount prescribed as required, giving, in extreme cases, as much as an ounce every hour or two. In my judgment this apparently heroic practice may sometimes turn the tide and avert disaster. The carbonate or the aromatic spirit of ammonia may prove a valuable adjunct, but in full doses, long continued, they are apt to derange the stomach. For the support of the heart, I consider strychnine and digitalis the most reliable remedies at our command. One or both should always be given when signs of cardiac weakness become manifest and persist despite the alcoholic stimulation.

In cases presenting a full bounding pulse and distressing dyspnea, veratrum viride or aconite is very grateful and is unquestionably serviceable. I consider the cautious use of these drugs entirely safe and, in appropriate cases, to be recommended. They are not used of late years as frequently as formerly, but they have their place in the therapeutics of acute pneumonia, and they should not be discredited.

Cathartics are usually indicated at the commencement and from time to time during the career of the disease. Saline laxatives in many instances act well, but I know that calomel is a much more thorough eliminant than this class of remedies and is, in consequence, often of greater service.

I do not recommend or approve of blisters in the earlier stages of the disease. They increase the discomfort of the patient and seriously interfere with satisfactory physical exploration, besides, in my judgment, being powerless for good. Mild counter-irritants are unobjectionable and generally suffice to alleviate if not to allay the pleuritic pain which is sometimes present in a conspicuous degree. Blisters, however, are not to be entirely rejected, for in the last stage, if the process of resolution or absorption should be arrested or unduly prolonged, cantharidal collodion or cerate over the affected part exerts a most favorable influence by stimulating the activity of nature's forces.

Under these circumstances sorbefacients are of doubtful utility. Mecurialization, I presume, now has no advocates.

The oil-silk jacket indorsed and employed by many practitioners is probably moderately beneficial by promoting gentle diaphoresis, but, like blisters, it prohibits physical examination of the chest.

During convalescence general tonic and hygienic measures are appropriate.

The development of secondary or intercurrent affections, or of complications during the course of pneumonia, should be met by treatment appropriate to the complication irrespective of the coexistent pneumonia, except in so far as the presence of the pneumonia may make it expedient in certain cases to modify the usual treatment of the complication.

LUMBAGO.

A prescription of Dr. S. Solis-Cohen's is:—

Sodium salicylate	½ oz.
Potassium iodide	2 dr.
Compound syrup of sarsaparilla	1½ fl. oz.
Water, sufficient to make	3 fl. oz.

M. Sig.— A teaspoonful in water thrice daily, after meals.—*Pract. Med.*

THE ENDEMIC FEVER OF THE EASTERN SHORE OF VIRGINIA.

BY GEO. W. LECATO, M.D.,
WACHAPRAGUE, ACCOMAC CO., VA.

Twenty-five years ago, the above title would have suggested the discussion of a disease differing materially in most of its essentials from that to which it now applies; for it is absolutely true, as we all know, that our present endemic of continued fever has not only quite supplanted the old types of our former periodical endemic, but is doubtless increasing in prevalence year by year. This fact naturally attaches a certain practical importance to its study, and furnishes my excuse for this subject. What I may have to say, however, will be merely cursory, embracing mainly such views as have been drawn from my personal observation, leaving you to take for granted the doctrines of etiology, pathology, and treatment commonly accepted by the profession.

In the first place, I shall state, as my individual conviction, that all the forms of continued fever prevailing on the eastern shore are of one origin, and due to a uniform specific poison. In other words, I believe that all the forms of our present endemic may be safely summed up under the title of *typhoid fever*—a specific disease, varying from time to time in many of its salient features, like other morbid entities, mainly as the result of peculiar local environment, systematic condition, and methods of treatment. This idea is admittedly true of most diseases. No one would expect, at the present day, that pneumonia would recover, as a rule, under the profoundly sedative treatment of Kasori, or the sanguinary lancet of the phlebotomists of former days. But statistics prove that the success of our fathers, in the treatment of this disease, was quite equal to that of ours. Pneumonia must have changed type in some particular essential; and yet we have the sub-crepitant râle, pulmonic consolidation, the rusty sputum, occasional pulmonary edema, and even purulent infiltration—the whole sum of pathological sequence. According to my observation, we have, in the continued fever of to-day, as a rule, the prodromic malaise; the tendency to epistaxis and other hemorrhages; marked sensitiveness of the bowel, in spite of constipation; the diurnal cycle of temperature; even rose spots in some cases; occasional perforations of the bowel—in fact, the well-known evidences of a peculiar specific poison, expending its local force in the right iliac region, and in the presence of which our antiperiodic sheet anchor is worse than a delusion. Granted that in private practice we are not often permitted the post-mortem evidences of Peyerian inflammation and ulceration; so complete a picture leaves us little room to doubt that the fever of to-day is the genuine enteric of Geo. B. Wood, the dothinenteritis of Bretonneau, and the typhoid of Louis.

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*Read before the Richmond Academy of Medicine and Surgery, January 15, 1895.

True, in an experience of thirty years, I have recognized the disease under varying manifestations. We find at the present day less coma-vigil and muttering delirium, as a rule; we have less trouble to restrain the bowel; cases do not run so rapidly to what is known as the typhoid state; in a word, there appear to be more mild attacks now than formerly. How much of this may be due to a recent modification in the intensity of the poison, and how much to the present vogue of withholding active medication, may be an open question; but my observation has never led me to believe the essential nature of the disease has sufficiently changed to entitle it to a new name.

I am sure I have never recognized a typical case of Dr. Woodward's so-called typho-malarial fever. As a matter of fact, I have not observed the two distinct types that enter into this supposed hybrid, manifesting themselves unmistakably in the same individual at the same time. I think I have never seen the one type run into or consecutively follow the other. Finally, I have never known any case of so-called typho-malaria to be cut short, or even modified, by anti-periodic treatment. Rather, on the contrary, I have been led to suspicion that these two poisons are so specifically distinct as to be in some way mutually antagonistic. Certain it is, however explained, that on the eastern shore, as elsewhere, the presence of one type, as the endemic, materially qualifies the prevalence of the other. I can recall a period in my earlier practice when continued fever, in Accomac and Northampton, was a comparatively rare disease. The unfortunate reputation the peninsula had earned at that day as a hotbed for malarious poisoning has not yet been lost, though, as we all know, no longer deserved. If we accept the so-called typhoid germ as the etiological factor in the production of continued fever, and the micro-organism of Laveran as the essential element in paludal poisoning, it would be interesting and instructive to demonstrate the correctness or absurdity of the convictions I have stated; but, so far as I know, these important demonstrations have not been made.

Of the peculiar character of the typhoid poison, we have, at present, only a broad field of speculation and the wonderful revelations of the microscope. Unfortunately, it may be said of the fashionable microbe theories, that while they have enlarged our learning, they have not greatly increased our practical wisdom. Does the disease really depend upon a microbe? If so, what are the peculiar conditions of its generation? Where does it mainly inhabit—the food we eat, the water we drink, or the air we breathe? And what peculiar change of location will explain how and why the typhoid germ of to-day should have so completely supplanted the miasmatic germ of thirty years ago? These are all practical questions of the greatest importance to us as practitioners—questions for which we are vainly seeking answers, not only from our own observation, but from the scientific investigations of others; for, locked up in these mysteries are hidden the problems of prevention and cure. Medical literature teems with plausible theories; you pay your money and you take your choice. Practically, the solution appears as remote as before. I confess that, individually, I have inclined to many different theories along this line. For instance, I had found typhoid so often among families drinking out of polluted and even filthy wells, I became a confessed convert to the poisoned water theory. Ultimately, I had a patient who was herself a crank on this very subject. For months no single drop of water had been allowed to pass to her stomach that had not previously been boiled. Strange to say, she was the only member of her large family stricken. I can recall a family in which every member was afflicted seriatim, who got their water from a driven pump thirty feet under ground, the pump itself situated on the highest elevation of the premises.

On the eastern shore, at least, the water supply derived from underground springs of higher or lower level, evidently has no connection with the prevalence of typhoid, as has appeared in other situations.

Another fact, hard to reconcile with the trend of our accepted theories, is that the poison is not necessarily bred in filth. The lady of the household last referred to was an uncompromising crank on the extremes of cleanliness. Indeed, on general principles, it may be said that the higher the civilization, the more obnoxious we become to typhoid infection; certainly the poor and squalid appear to have no peculiar claims of class distinction to the disease. And so, unfortunately, some practical negation always appears to shut us off in the line of any theory we may attempt to pursue. For the present, to be candid, I confess I am entertaining no very settled notions respecting the etiology of typhoid fever. I am inclined to think we know as little of practical value on this subject as did our fathers. *They* hinted darkly, in their day, at certain poisonous "humors" manufactured in the great laboratory of nature under laws of chemical affinity beyond their chemistry. In the later wisdom of our day, we call these results *ptomaines*, without being able to explain the chemical processes involved in their generation. The guess of our fathers was probably a cloak for their ignorance that fitted as becomingly as the newer cut of a later day, and doubtless they wore it as honestly. And I am verily coming to believe in my own mind, the time is not distant when the *ptomaine*—the old "humor" of our fathers—will play a stronger rôle in fashionable etiology than the present popular and omnipotent microbe. History repeats itself in many divisions of human research. It may be we are already drifting backwards towards the theory of our fathers, to take new bearings from old landmarks and lay out new lines of research not so much in the domain of bacteriology as in the expanding and limitless field of spontaneous toxicology.

I have never believed for a moment in the *contagion* of typhoid fever. It may be *infectious* in certain ways not well understood. Its specific poison is doubtless localized, and those obnoxious to it, exposed to like conditions, experience like results. I think I have never discovered stronger evidences of the contagiousness of this disease than apply with equal force to malarious fevers and even common colds.

I shall not consume a moment with reference to its symptomatology. We all agree that the diagnosis is often difficult and sometimes impossible in the earlier stages; but that the thermometer may be safely trusted to settle the doubt, even short of those characteristic features common to its full development. And, in the matter of prognosis, I shall simply say there is no disease known to us of so grave a character, involving so long a course of continued pyrexia, and subject to so many complications and accidents, that so often ends in complete recovery. Still, the maxim of progress laid down by the older writers has probably never been improved upon, namely, that while no attack is so desperate as to encourage despair, there is none so mild as to be without danger.

What I may say of the treatment will be in nowise exhaustive—having reference mainly to my own views and practice—not because I wish to appear egotistic, but because I desire to invite discussion; to draw out a comparison of opinions and experiences for my own instruction as well as yours. I have held for many years that the professional world should long ago have reared a monument to that philosopher, Pitcairn, who, when asked what he thought of a certain treatise on the cure of fevers, replied, "I do not like fever curers. You may guide a fever; you cannot cure it. What would you think of a pilot who attempted to quell a storm? Either position is equally absurd. In the storm, you steer the ship as well as you can; in a fever, you can only employ patience and judicious measures to meet the difficulties of the case." Perhaps the application of this doctrine, limited to the management of typhoid fever, has not only gone a long way to make the fever of our day a milder disease than formerly, but has really involved the explanation of our present success. Until we unravel the mysteries before alluded to, typhoid will probably remain in the class of so-called self-limited diseases. However revolting to our sense of professional pride, we may as well admit there is no weapon known to our science that will strike down the malady at any period in its progress, or materially abridge its duration. Among the painful reminiscences of my earlier professional life, I recall to this day the hesitation with which I accepted this fact. And yet, what serious disease is there in which more may be done to relieve suffering, ward off danger, and ultimately lead the exhausted victim to recovery?

I have an abiding faith in the thorough, but careful, cleansing of the intestinal canal as a preliminary early treatment. The bowel is to be the battle-ground, and the ileum to bear the main brunt of the contest. If this is not the avenue through which the poison originally reaches the circulation, it is certainly the outlet of depuration, and consequently a dangerous seat of auto-infection. Here the long series of morbid processes are to be carried on, whether we incline to the modern theories of microbic multiplication or the older notions of chemical putrefaction and fermentation. But the choice of means to this end is a matter of grave importance. My own experience is that the most unpromising cases falling under our observation are those that have been doctored at home with compound cathartic pills and other irritant purgatives. One of the earliest deaths I have ever seen in the disease followed two or three doses of croton oil, administered with the avowed purpose of "touching" an innocent and falsely accused liver. In spite of some recent journalistic assertions, I should not dare attempt the use of any purgative irritant to either the mucous or muscular coat of the bowel. I usually give one or two small doses of calomel, following with salines and large enemata to flush the bowel. I am still old-fashioned enough to believe that calomel unloads the portal circulation, that it stimulates glandular excretion, and that bile limits intestinal fermentation.

An imperative necessity is the regulation of the diet. The victim has a long and doubtful struggle to encounter; the vital forces must be provided for. And yet states of abnormal temperature impair and even suspend the digestive powers. Solid food is rarely digested, and if it passes into the bowel it must necessarily become not only an irritant, but if you please, a culture field for microbes, or a fermenting mass that only adds to the tympany, diarrhea, and consequent pyrexia. Fluids are more easily absorbed and furnish little residual bulk. The practice laid down in some of the English hospitals, to give no food during the fever that will not easily pass through the meshes of a fine sieve, is at least safe. I encourage the free use of water, plain, medicated, and flavored. I believe in its refrigerant depurative action.

Is there anything to be done to limit the propagation of microbes, or abate the tendency to putrefactive changes in the bowel and blood? This is a very interesting practical question, and medical opinion is in no wise agreed upon the answer. A number of years ago I began to give what we know as carbolized iodine, partly on the theory of its germicidal properties, mainly because of the professional policy that demands in all cases some sort of medication. I shall not tire you with notes on this subject, but will simply say, that without expecting any marked results my experience has confirmed my confidence in the remedy. Recent observation has inclined me to the belief that the phenic acid in this combination is the valuable factor, and I usually leave out the iodine now because it renders the acid less acceptable to the taste. There are few patients who object to small doses of the acid properly diluted and flavored, and, to get its results, it must be regularly and steadily continued day by day, from early morning until late bedtime. I never give medicine or food during the night, except to meet the demands of a pressing indication. While this remedy is evidently not a direct antipyretic, experience proves that after its administration for several days the temperature falls as a rule, the diarrhea moderates, the tympany lessens. Recent studies of the physiological effects of phenol appear to indicate that it is not only an antiseptic, germicide, and local anesthetic, but a vaso-motor excitant; Bert and Jolyet claiming that it acts like strychnia on the excitability of the medulla. If this be true, it stands on physiological grounds as an ideal remedy in this and other low forms of fever due to septic poison. This view accords with my own experience. Dr. Robie Wood, of New York, has lately claimed that it tends to prevent the falling of the hair.

The treatment of high temperatures has been, for the past several years, one of the most interesting questions connected with the management of fever. In private practice, the Brandt method of cold baths is an awkward and bunglesome recourse, which may be simply eliminated from present consideration. While I might find a case in which I should be tempted to employ it, I have not yet found such a case. I rarely use any internal medicine for the reduction of temperature. I experimented in my own individual case, during an attack of this disease, with some doses of the coal-tar derivatives, and I shall never attempt this treatment again. My personal conviction is, that under the readings of the thermometer we are apt, in this day, to grow unnecessarily apprehensive in the matter of temperature, and lose sight of other indications hardly less important. It is undoubtedly true that high temperatures coincide with desperate conditions, but as to which may be the cause and which the effect is always a question of practical interest. For instance, an excessive temperature induced by a mass of fermenting milk-curds in the bowel could not be scientically and appropriately treated with a cold bath. And it is wise in all cases of hyperpyrexia to investigate for any possible condition that may explain the rise of temperature, with the hope of being able to apply treatment to the cause rather than the effect.

In spite of the commonly accepted view of damage to the integrity of animal tissues under high temperatures, I believe our apprehensions are in danger of being over-excited. Experiment has demonstrated, time and again, the remarkable resistance of the human body to extremes of heat, even under long exposure. It is a question, then, how far we may be justified in our efforts to reduce temperature that involves either prostration or unnecessary perturbation. I can recall several cases of this disease, making good recoveries, in which the average of minimum temperature did not fall below 105° for eight days; and experience has certainly taught me to look with more anxiety to the pulse for a warning of peril than to the thermometer. Sponging, either cold, tepid, or warm, over the whole body, and continued more or less persistently during much of the afternoon and evening, when the maximum range is being reached, has rarely failed, in my practice, to moderate the temperature and promote comfort and sleep. The end is thus attained without unnecessary fatigue, dangerous movement, or even mental shock. In addition, I have sometimes given one or two doses, 5 grs. each, of antikamnia and quinine, during the afternoon and evening, for the purpose of anticipating and prolonging the remission, softening the skin, and securing quiet sleep.

When the patient begins to show signs of muscular prostration, and the force of the heart's systole is apparently failing, my main reliance for years has been placed on strychnia, given in small doses and often. I feel sure that many a flagging heart may be sustained by this remedy through the trying ordeal of the last weeks of an attack. On the subject of alcohol, I have nothing to add to what you already know, except to say that in late years my doses of whisky are much smaller than they used to be, and that I expect less from it now than formerly.

Of the manifold incidents and accidents presenting themselves in the course of the disease, I have not the time left to speak. A consideration of these would make up really the most interesting and important part of a paper on this subject. It is exactly here that the best judgment of a physician is most severely taxed and his skill exemplified. It may be said, in a general way, that the doctor, who is the most watchful, the quickest to apprehend the peril of complications, and the most resourceful in wisely meeting emergencies, will have the best success. But the field is too broad to be entered. I want to call attention, however, to one, not very frequent but occasional, distressing symptom in nervous subjects suffering from this disease—more common now than formerly—insomnia. Patients do not always sleep who appear to sleep; are not always properly rested by the apparent sleep they do get, because the sleep is not sufficiently profound. I shall never forget the luxury that a few doses of opium brought to me in the latter stages of this fever. I will add a passing reference to that common and serious event which so often complicates mild as well as severe cases—hemorrhage from the bowel—to say I have found large doses of opium the most useful treatment. The exigency is often urgent and pressing; there is no time to waste on astringents. Peristalsis must be profoundly controlled, and the heart's action also. These threatening cases often do well eventually, but it happens the only case of typhoid fever I have lost during the past four years was a very mild case that died speedily from this complication. I had meant to say something about relapses and recrudescences of fever, so common in typhoid, but this paper has already exceeded its legitimate limits.

THE SURGICAL TREATMENT OF DYSENTERY.*

BY E. L. PATTERSON, M.D.,
BARNWELL, S. C.

Perhaps no disease which we are called upon to treat is more unsatisfactory, so far as the results of the treatment employed, than the one under consideration.

Until recent years little or no advance has been made in the treatment of dysentery; but advancing science, with the introduction of antiseptics, and a better knowledge of hygiene, has done much to eliminate this disease. It is one of the oldest known diseases in its clinical history. Hippocrates, 430 B. C., made frequent reference to the disease, and the ancient writers observed that it was a disease of spring and summer, and in some way was connected with heat and moisture.

Opium, at this period, was used extensively in the treatment of this disease, and was considered the "sheet anchor." It was used in the form of the juice of the poppy. By the time of Galen, it was used to such an extent as to call for protest against its abuse.

Sydenham, in 1669, was an ardent advocate of the opium treatment, but prefaced it with a laxative. He also flushed the rectum with liquids, all of which might be considered good treatment at the present day.

Zimmerman, in 1720, discarded venesection, and was among the first to recognize the value of ipecac, and objected strenuously to the use of opium until the alimentary canal was cleared by appropriate cathartics. This marks an important era in the treatment of this disease.

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* Paper read before South Carolina Medical Society, April, 1895.

A writer of repute has said that dysentery was pre-eminently a disease of army life, its victims, among soldiers, numbering more than all the other diseases put together. It has followed the tracks of all the great armies which traversed Europe during the Continental wars of the past two hundred years.

It decimated the French, Prussian, and Austrian armies in 1792, and in our late civil war camp dysentery played an important rôle, causing a large death-rate among the soldiers and a still greater among the prisoners.

It is not my intention to go into the clinical history of this disease to any great extent, but simply to call attention to a mode of treatment which, as far as I have been able to learn, has never been employed by the profession or others, and which my limited experience has proven a specific, and to which I have seen fit to apply the term "Surgical."

In my locality, every spring and summer, we have an epidemic of dysentery, beginning, usually, among the negroes, but extending likewise to the whites. In these epidemics I have had ample opportunity for study.

I observed that there was a spasmodic contraction of the anus, and this condition, I thought, was due to the irritation in the rectum, which excites the sphincters into firm contraction. The contracted condition of the sphincters, I concluded, prevented a complete evacuation of the contents of the rectum, and thereby produced the tormina and tenesmus so characteristic of this disease. Having reached these conclusions, I determined to try dilatation of the sphincters and operated as for fissure *in ano.* The result was so gratifying that I have continued this mode of treatment, and now, immediately upon seeing a case, I dilate both the internal and external sphincters, but not quite to the extinct as for fissure *in ano.* It is my custom to give a little chloroform, though I have operated on quite a number without doing so.

The fever which accompanies dysentery is not the result of any inflammatory condititiou which exists in the rectum, for in the puerperal condition, we have a more inflamed condition, and yet no fever unless from sepsis; and we do not anticipate fever in our surgical operations unless from lack of antiseptics, therefore we must conclude that the source of fever in dysentery is the result of septic absorption.

The after-treatment consists in irrigating the rectum with antiseptics and astringent solutions, although boiled warm water, one quart, with the addition of two drachms of powdered borax, has given me as good results as anything else. After the dilatation of the anus the dysenteric evacuations cease.

The internal treatment consists of the usual remedies, calomel, salol, and ipecac, in small doses, repeated hourly, until the physiological action of the calomel and ipecac is obtained, followed by a saline cathartic, being my preference, and, if necessary, morphine, gr. $\frac{1}{4}$, atropine, gr. $\frac{1}{150}$, hypodermically, to relieve pain.

The diet should consist of broth and raw eggs. As our water in the country is all surface water, I order boiled water for drinking purposes.

The sanitary surroundings should be looked after and all of the evacuations should be disinfected.

The room should be well ventilated and the bedding frequently changed.

[In the discussion which followed the reading of this paper, Dr. Simon Baruch, of New York, said: I have come from New York for the purpose of adding to my stock of knowledge; I have been here fifteen minutes, and have already learned something profitable. The original method of treating dysentery, just explained by the author, appeals to me as one dictated by common sense; it fulfills all the demands of modern surgical ideas. Common sense is, alas, but too infrequent in medicine, although nowhere may it be applied to greater advantage. The author has omitted, perhaps for the sake of brevity, what I regard as the true principle of his method;—drainage is, next to asepsis, the great promoter of the cure of inflammation, because it removes the products of bacteria and inhibits their multiplication. The lower part of the colon being involved in dysentery, we have a cavity which is practically closed, and, therefore, all these products are incarcerated more or less. Indeed, we may compare this condition to that which exists in an infected stump, whose skin-flaps have healed, leaving a small opening through which the pus is oozing. What does the modern surgeon do? He lays the flap open freely to drain the stump and irrigates it; healing at once begins. Now, when Dr. Patterson paralyzes the sphincter, which closes up the rectum and colon like a purse-string, he allows free exit, without tenesmus, which prevents it, to the mucus, pus, and bacteria which accumulate in dysentery; he then irrigates the bowel without difficulty; he does it as thoroughly as the surgeon does the stump, and this is the reason of his success. It gives me pleasure to commend a therapeutic measure, which is not based upon empirical grounds alone, but whose rationale may be so clearly explained upon principles which have been accepted by the whole medical world. If the method is original (and I have no reason to doubt it), your Association may be congratulated upon its being promulgated by one of its members.]

STRYCHNINE IN PREGNANCY.

Olenyn has successfully used strychnine in sixteen cases for the correction of weak labor-pains, in doses of 1–32 to 1–25 grain twice daily, at intervals, during the last six or eight weeks of pregnancy. Four of these cases were anemic primiparæ from nineteen to thirty-two years of age, with weak muscles; three were multiparæ under thirty years, with habitual weak labor-pains; four suffered from chronic metritis and had been pregnant at intervals of from three to twelve years; one patient had a small uterine fibroid; two had flabby uterus and relaxed abdominal walls; one had tertiary syphilis and general debility, and another diseased appendages with hysteria. In two primiparæ the forceps had to be used, and in one the child was dead; but in all the other cases delivery was rapid and regular and the children lived. The third stage lasted from ten to twenty minutes and *post-partum* contraction of the uterus was excellent.—*Kansas City Medical Record.*

THE suprapubic method of lithotomy seems so thoroughly to have established itself among surgeons that one may easily look forward to its being the operation of the future.—HEATH, *Medical Record.*

SOCIETY REPORTS.

ATLANTA SOCIETY OF MEDICINE.

ATLANTA, GA., February 4, 1896.

The meeting was called to order by the Vice-President, DR. W. A. CROW.

The following members were present: Drs. Baird, Crow, Campbell, Duncan, Felder, Hurt, Kendrick, Love, Olmsted, Hutchins, Hubbard, Richardson, Spears, Stockard, Champion and F. W. McRae.

DR. J. C. OLMSTED read a paper on "Pathology of Pneumonia"; DR. J. B. BAIRD on the "Treatment." (See previous pages of this issue.)

DR. W. S. KENDRICK was requested by the chairman to discuss the "Signs and Symptoms." He said as follows: "I did not expect to say anything to-night, and came to hear the papers by the gentlemen appointed to read them. In regard to the signs and symptoms of pneumonia, I would say that it is one of the easiest of all diseases to diagnose when one is acquainted with the general facts. I do not know of one that is easier when we take into consideration the symptoms of chills which usually usher in the disease, and the high temperature, etc. As has been stated, there are three divisions of the disease. The first stage is the stage in which we have an active flow of blood to the lungs, in which usually the lower lobe of the right lung is filled with blood. We have there a beginning exudation with which there is high temperature, rapid pulse, and rapid breathing. There is only one other disease which produces as profound an impression on the nervous tissues, and that is acute general peritonitis. The first stage of the pneumonia lasts from one to three days. During that stage of the engorged blood vessels we have the products of inflammation thrown out, and, as a rule, unless in an old person or a child, the lung rapidly goes into the state of red hepatization. The second stage lasts from five to seven days, in which, in typical cases, the air is entirely excluded, and this stage is accompanied by the constitutional symptoms which exist in the first stage. The pronounced constitutional symptoms last from somewhere in the middle of the second stage until the crisis, when they disappear. The last, or third, stage is resolution. Pneumonia ordinarily runs two weeks, but resolution is sometimes delayed three or four weeks. The physical signs which accompany the constitutional symptoms can be very readily marked out. In the first stage we have dullness, but not absolute dullness, as the lung is not thoroughly distended. Upon auscultation we get a harsh inspiration and a prolonged expiration. In the second stage we cannot mistake the physical signs. If you are acquainted with the normal vesicle murmur you can scarcely mistake a case of solidification in the second stage of pneumonia. Of course the second stage would show us less of distention. The two most important which make up our diagnosis are numbness and dullness. We get the dullness on account of no air being in the lung. Pleurisy with effusion is the only thing that would give dullness on percussion, but there is a way that we can distinguish between the two, and that is by auscultation. In pleurisy the vesicular murmur is cut off completely, and, of course, the bronchial tubes are rolled up and we get nothing except from the posterior root of the lung and there we get a far away murmur. We get what we call bronchial or tubular breathing. In acute pneumonia we get the tubular breathing, but not normal. In the acute pneumonia we can get the sounds at only a small space on the lower portion. We must go to the posterior portion. In the third stage, if we have attended a case, we cannot mistake it. This is the time of resolution, and it is occupied by a longer time than the second stage. It is the stage in which the constitutional symptoms have entirely passed away. Therefore, we have a more or less quiet pulse and temperature almost normal. We are then dealing simply with a lung which is returning to its normal condition. It is the stage of râles. The solid condition has to change into a liquid form before it can be absorbed. Where we have the bronchial tubes blocked up with exudation this is removed by expectoration, and consequently the expectoration is more profuse at this time. The stage of resolution is continued until completed. We get râles at the very beginning of the third stage, but as absorption goes on from day to day we get back to the stage of harsh respiration, and this lasts for some time. These are some of the many points of physical signs. The point that I would insist upon is, that to diagnose acute lobar pneumonia, if it is confined to lower right lobe, we must go to the posterior surface of the chest. My remarks have been confined entirely to the acute lobar pneumonia, as I understood that to be the form under discussion. The other forms of course give different symptoms. There would be more trouble in diagnosing the catarrhal pneumonia. Lobar pneumonia is nearly always single, but the other is double. It is simply a continuation of the inflammation of the mucous membrane on both sides of the chest. The constitutional symptoms of catarrhal pneumonia are almost entirely different. The temperature rapidly reaches its highest after the chill, and the disease is exceedingly fatal, and also we have variations of the temperature. The temperature may be up to 103 and then decline. The acute symptoms last from three to six weeks in many cases, and one lung may be more involved. It is the disease in which we do not have the rusty sputa."

DR. LOVE: "I do not feel that I can add anything to what the gentlemen have already said, except in one thing I would like to differ with Dr. Baird, and that is in the treatment of pneumonia in infants and young children. I am a strong advocate of the oil-silk jacket. I think it is most efficient, and apply it in such cases and keep it on continually. I believe that quinine in large doses will come nearer than anything else to aborting the disease."

DR. DUNCAN: "I have been very much interested in the papers and the remarks by Dr. Kendrick. My experience would cause me to differ a little with the view advanced about its being a self-limited disease. They have spoken about its lasting from ten days to weeks. I think that in many cases of the acute form it can be cut shorter than ten days. I would rather treat pneumonia than any disease I treat, but there are cases in which the right heart is overpowered by overwork. I have seen a few cases that I was sorry after they were dead that I did not bleed them. As regards the use of remedies in pneumonia, I vary in my treatment, of course, according to the patient. I treat the patient and not the pneumonia. In the last week I have seen two cases which were very different. One was a young woman with a baby three weeks old, suffering from general septic intoxication, and pneumonia set in. In this case she did not have the pneumonic cough, and did not have any cough at all, and you would not suspect pneumonia from the inflammation usually spoken of as accompanying it. Her respiration was 40 to 50 per minute, and the physical conditions on auscultation were well defined. I applied turpentine, lard, and mustard around the chest every four hours to six hours, and did not remove the previous application when renewing. I gave quinine and small doses of Dover's powder every four hours, and then quinine, salol, and sulphate of morphine to lessen the wakefulness and restlessness. The salol was used on account of excessive tympanitis. I also gave her turpentine internally. From an almost hopeless condition she has recovered slowly. In the last five days I saw another case following measles. A young lady had measles three weeks since, and after being up ten days she was attacked with pneumonia in the left lung. The attack was accompanied by severe pain, brick-dust sputa, cough. In that case, although having had fever with pulse of 100 and temperature of 102½ to 104, I gave veratrum, digitalis, quinine, camphorated Dover's powder, and capsicum. When I called the second day I could not see any improvement, except the pulse came down, but I did not know anything better to do, and so decided to continue this until the next visit. At the next visit she was very much improved, but her temperature was 103, but on the fourth day her temperature was normal and pulse 72. On the fourth day of acute pneumonia following measles I do not think better results could have been obtained with anything else than the results I obtained with veratrum. I believe we would do our patients more good if we gave veratrum in pneumonia more frequently. I have never seen a case injured by it. I approve of the course of treatment laid out by Dr. Baird. As supportive treatment I give whisky, milk punch, peptonoids, and in the latter stages I think liquid peptonoids and creosote are beneficial."

DR. HURT: "In regard to the causes and pathology mentioned by Dr. Olmsted, I must say that I fully concur with him. I think there is one point that we do not appreciate as much as we should, and that is that fifty years ago the people were not what they are to-day, and this is due to the energy and push expended in endeavoring to keep up with the latest things, and the nervous system being kept in a strain. As to the experiments made lately by the Klemperer Brothers, I think these experiments put the pneumococcus very much where the tubercular bacillus is in Koch's treatment. I think that it is in doubt, but I believe that we are on the right line if we ever succeed in getting there. I believe that, according to these gentlemen, twenty of the healthy men and women have the pneumococcus in their system, and I would like to know if they immunize one of these and then have the personi nhale strong acids, whether it will inflame the lung tissue. I confess that I am not entirely satisfied that it is dependent upon the blood condition, but I think it is somewhat due to this. As to signs, I was in hopes that Dr. Kendrick would mention something in regard to the abscess which may be present at the onset of the fever, and as the pus forms of course we have the elevated temperature, etc. As to the treatment, I think we are so widely at variance because we have not yet arrived at the definite explicit condition of the patient in pneumonia, or rather, we have not arrived at its true pathological causes. I believe that it is attendant upon a shock upon the nervous system. The history of pnemonia is that a large per cent. of pneumonic cases die, and too large to say that it is a self-evident disease; and as to its being cut short, I think it is possible to arrest pneumonic inflammation. Klemperer Brothers say that they can immunize the patient and arrest the course of the disease. If they are true about this, then I say it can be cut short. As to whether this is true, it has to be settled. From the hour the disease sets in the patient is under a strain and the blood is allowed to be filled with clots, which will be thrown upon the heart, and I think that we jeopardize the life of the patient. As regards the use of remedies, I think that at the outset it is proper to give a mercurial cathartic and some opiate with it. At the same time I would direct that flannel goods saturated with oil be applied to the chest first, and over that the thickness of two to four inches of absorbent cotton. In the first stage I would give this treatment and would keep it on, but in the third stage would remove this and make application of blister. I use as a popular remedy ammonia and small doses of anodyne, so as to make the patient comfortable and keep the blood in as healthy condition as possible. I would like to enlarge on the treatment, but I will simply say that I have bled. I will mention the case. I was called to see a farmer in March, and I would mention that he had a hernia. He was taken in the field and I reached him in four hours and found him with difficult respiration, thirty to forty-five times to the minute, great pain and high temperature. I bled him fourteen ounces and had him wrapped in cotton batting, and gave mercurial purge. The next day I found the patient able to go through a fair respiration but the pneumonia was still active. On the fourth day I removed the cotton dressing and applied blister to the whole right chest, and gave veratrum, and left instructions to give whisky later if stimulant was needed. The next visit I found him with easy respiration and he went on to rapid recovery."

DR. MCRAE: "I wish to speak very briefly on two points. One in reference to the physical signs of pneumonia. We have the rules in the early stage and in the beginning of the stage of resolution, and it seems to me that this is one sign that should not be lost sight of. As to treatment, I do not know that my views will be accepted, as they differ very materially with those that have spoken. I do not believe that the temperature has anything to do with the course of the disease or the prognosis. I do not believe in the treating of the temperature or the administration of cathartics. The giving of the antipyretic for the antipyretic effect is contrary to my idea of the treatment of the disease. I do not say that I would not give an antipyretic, but I would give perhaps in a case with anodyne. I rely on two things, and they are strychnine and alcohol, and I give them from the beginning. I believe in a mild counter-irritant. It seems to me that I have gotten marked and almost immediate effect on administration of strychnine. I rely on the administration of the strychnine, then the alcohol, and of course give nourishment. I think the strychnine has a tonic effect on the nervous system."

DR. OLMSTED: "I understood Dr. Hurt to ask if a person was immunized and then inhaled gases, what effect would it have on the lungs? I would state that this experiment has been tried, and resulted in forms of catarrhal pneumonia, but never in lobar pneumonia. I would like to say that I am sorry to hear veratrum recommended. When we remember that the organ is carrying a heavy load, to make a general practice of using a remedy, which, whatever be known about it, certainly has a depressing effect, is certainly dangerous. I admit that it may be good in some cases. We all admit that there are certain cases in which, with a full heart, the abstraction of blood is most valuable, but I think that we had better let veratrum alone."

DR. KENDRICK: "I had one point in my mind when I sat down, which I hoped some gentleman would mention and explain, and that is, what produces the crisis? Why do we have in this disease, and almost only in this disease, an abrupt termination? Why do we have a pulse dropping down from 130 to normal, temperature from 105 to normal, and a respiration of 40 to 60 dropping down to 20 or 24? These have never been explained. If we accept the theory that the cocci are the cause of the trouble, we might, by a process of reasoning, prove to our minds why it takes place. They produce themselves rapidly, propagate exceedingly fast, and if the cocci are the cause of the pneumonia, and after a certain number of days they die and pass away and the poisonous material no longer exists, we have an abrupt termination of the disease. I think that the theory of Klemperer Brothers is probably correct. In regard to treatment, I do not confirm and I do not condemn veratrum. I see no reason why it should be used. I believe with Dr. McRae, that in a number of cases of high temperature that if we do nothing for this that it will go on to recovery. I can see very readily where veratrum would be used in certain diseases, but I cannot see why it would be used after the first stage of pneumonia. In the first stage, I believe that if opium with belladonna is used in large doses, or in sufficiently safe doses, that we would do more good with it alone than with other treatment. Now, in the second stage, in which the patients usually die, there is great need to sustain a flagging heart which is overpowered. This is the reason why the disease is so fatal; they die of absolute heart failure. They have a weak heart from distended chamber in the right ventricle, and consequently this often causes them to die suddenly if they take any exercise. One case of pneumonia I had warned particularly against sitting up in bed, but contrary to my instructions he sat up soon after I left, and when I returned an hour later he had been dead half an hour. I had not given any veratrum, but simply supportive treatment with alcohol. I believe that alcohol and strychnine combined with opium are the main remedies."

DR. BAIRD: "As to phenacetin, I would say that from the standpoint of the disease I would not consider it of any consequence, but as to its effect on the patient, that is another thing. Its effect is too depressing on the patient, and, therefore, I am opposed to its use. As to veratrum, I have seen it used in a number of cases and no harm come from it, but have seen good result. If some of those who are sceptical about veratrum will give a dose and see the active heart come down to a steady beat, it will be hard to convince them that they have not done some good for the patient, although they may not have done anything for the disease. I have seen it done many a time, and some importance should be attached to it. I think it is entirely proper when used in its proper way. There is greater liability to the forming of clot in the slow heart than in the rapid heart, and therefore, of course, the veratrum should be used judiciously. The veratrum appears to strengthen the heart. I use it as long as the symptoms call for it, without regard to the stage."

DR. MCRAE reported a very interesting case of appendicitis on which he had operated in the afternoon. The patient was a young man, and he had had no previous attack, and the symptoms developed only fifty-six hours before the operation was performed. The local symptoms were tenderness and a very marked tumor. When operated found the omentum adherent to the appendix and completely surrounding it, forming a sac. The appendix was very much inflamed, and there was about a teaspoonful of pus. Death would certainly have resulted if the operation had not been performed. When operated the temperature was 101½, and pulse 120 and regular. There was no adhesion of the appendix to the wall of the intestine. Saw the patient this evening at half past six o'clock and his temperature was normal.

W. L. CHAMPION, M.D., Secretary.

HOMEOPATHIC AND ECLECTIC THERAPEUTICS.

Here are some lovely illustrations of Homeopathic and Eclectic therapeutics. Dr. Frank Kraft, in the *American Homeopathist*, says that "some women in sleeping have the bad habit of placing their hands over their head. This indicates a remedy; it also sometimes denotes a tendency to falling of the womb. The remedy most prominently indicated is *puls. Nux vom.* is the next best remedy for the condition of putting the hands over the head in sleep; it is better for the man, *puls.* for the woman. *Ars.*, *bell.*, *platina* and *calc. carb.* are also indicated for the hands *under* the head. In asthmatic conditions or dyspnea, when the hands are placed over the head, *nux vom.* is indicated."

Slominskie, in an Eclectic journal, conveys the following useful information about prolapsus uteri:

"Alcohol burned in a cup, and patient standing over it for five minutes with limbs apart in a nightgown, will contract the uterus, and after using it for a few nights a patient suffering with prolapsus will hear the uterus flop back in its place with a noise which can be plainly heard by a bystander."

From Moore's *Common-sense Homeopathy* we learn that the "precision of homœopathic prescribing is unattainable by 'allopathy' or any other 'pathy,'" and the author arranges what he calls his "time-table of drugs," for the treatment of ague. Thus if the chill comes on from 7 to 9 o'clock *eupatorium* is to be used; if it comes from 10 to 11, *muriate of soda;* if at 11, *quinine;* if from 1 to 2, *arsenic;* if from 3 to 6, *cedron;* if at 9 P.M., *gelsemium.* What to do for chills occurring at hours not embraced by this simple table we are not informed.

CORRESPONDENCE.

NEW YORK LETTER.

NEW YORK, February 15, 1896.

This being the season of the year in which cases of pneumonia, pleurisy, and empyema are very frequent, it seems opportune to refer to a recent discussion in the Academy of Medicine on empyema as it is found in young children. In discussing the bacteriology of this subject, Dr. Henry Koplik divided the cases, according to the mode of infection, into (1) metapneumonic; (2) streptococcus empyemas; (3) tubercular empymas, and (4) fetid empyemas. Fully two-thirds of the pleurisies occurring in young children have been estimated to be of the first variety. As bearing on the matter of diagnosis, Dr. August Caillé said that in small children the change in level of the fluid due to changes in the position of the patient was not easily detected. Several of the speakers agreed as to the very great difficulty experienced in actual practice in differentiating between a fluid effusion in the pleural cavity and pneumonia in infants under eighteen months old. The importance of that peculiar sense of resistance imparted to the finger used as a pleximeter, during percussion over fluid in a child's chest, was emphasized and dwelt upon by both Dr. Caillé and Dr. Winters, and the latter seemed to think that much of the difficulty in making the diagnosis of pleuritic effusion in these little ones would vanish if the physician took the precaution to see that the child made very deep inspirations while he was practicing auscultation. If this were done, a sound would be heard, which, although difficult to describe, is totally different from that heard over a pneumonic lung. All agreed that the crucial diagnostic test was the insertion of an aspirating needle, and Dr. Caillé made an important practical point by calling attention to the liability of getting into error by mistaking for pus the admixture of a few drops of serous fluid with some of the antiseptic solution left in the syringe. He advised covering the site of the puncture with a bit of gutta-percha tissue, made adhesive by moistening it with chloroform. Dr. W. P. Northrup insisted very strongly on the absolute necessity of using a needle of much larger caliber than that commonly employed, otherwise the failure to withdraw fluid could not be considered as positively indicating that no fluid was present. It is also important to make more than one puncture, should no fluid be found at the first attempt. There is no danger of injuring the liver if the puncture is not made on the right side below the eighth intercostal space. The sixth intercostal space is ordinarily a convenient point to select for exploratory puncture, but experience has shown that no matter where the opening be made for drainage, whether high up or low down, drainage is effective. From the number of cases following pneumonia it is evident that we must ever be on the alert in attending little children with pneumonia, to detect promptly the occurrence of an effusion, whether serous or purulent. It is the failure to draw the line sharply between the original pneumonia and the subsequent empyema that is responsible for so many deaths from infantile empyma. A safe rule is to make an exploratory puncture in cases where the protracted course of the pneumonia leads us to suspect that we may be dealing with this very important and common sequela. Dr. H. D. Chapin says that if, in the course of a pneumonia, we observe an area of dullness beginning at the apex, there is good reason for believing that it is due to a pleuritic effusion.

In the treatment of infantile empyema, Dr. Joseph E. Winters said that we should not forget that an empyema does not heal up from the bottom, but by expansion of the lung and the ascent of the diaphragm. If there were no cyanosis or other special contraindication, he did not object to placing the patient *partially* under the influence of an anesthetic, preferably chloroform, but full anesthesia was very undesirable, as it was by the coughing and crying, aided by the expansion of the lung, that we expected to secure the expulsion of the pus from the chest. For this reason it was also useful, just after making the incision into the chest, to give the child a teaspoonful of undiluted whisky. The incision should be at least two inches in length, and two or three inches above the normal base of the thoracic cavity. The patient should lie on the affected side and close to the edge of the table. Dr. Winters is very strongly opposed to resection of a rib in these cases of empyema in little children, (1) because he considers it entirely unnecessary; and (2) because the mortality following rib resection is 80 per cent. as compared with a mortality of 25 per cent. after simple incision. On the other hand, Dr. B. Scharlau says, from an experience of over one hundred operations for resection of rib for empyema, that he is convinced that convalescence is much more rapid than after incision without resection of a rib; and in this opinion he is supported by Dr. Joseph D. Bryant, the president of the academy. Irrigation of the pleural cavity after incision is not very commonly practiced here, although Dr. Winters advocates the use of hot water for this purpose, on the ground that it favors the escape of large coagula. This advantage is offset, in Dr. Caillé's opinion, by the effect of irrigation in breaking up adhesions between the lung and the wall of the thorax.

Tuberculosis is ever with us, and it is right that the laity as well as the medical profession should be freely informed regarding such acquisitions to our knowledge as bear upon the dangers of disseminating this disease, and the best means of preventing this; but so much has appeared in newspapers and other journals in recent years, that the public begins to show evidence at times of being a little "panicky." This has led to many heartless and unnatural acts, such as forsaking dear ones suffering from this malady, or placing them in some institution, and endeavoring to keep them from returning home for fear of others in the family contracting the disease. This is another exemplification of the old adage, "A little knowledge is dangerous." It is fortunate, therefore, that there has been a recent contribution to medical literature which dispels some of the groundless fears entertained by many, both within and without the profession, and makes our knowledge more definite. Dr. Irwin H. Hance, who has spent several years with Dr. Trudeau, in the Adirondack cottage sanitarium for consumptives, has presented to the Academy here the results of a study he has made regarding the infectiousness of the dust obtained from the various parts of this sanitarium. The experience of that well known sanitarium has lead to two most important conclusions, viz.: (1) that buildings in which consumptives are housed do not readily become infected with the germs of tuberculosis, if certain simple precautions be taken; and (2) that a tuberculous patient does not infect others by contact, but by their secretions, chiefly the sputum. The dried and pulverized sputum may be considered in practice as the infectious element. It has been found that dried sputum will retain its vitality for at least three years, yet the bacteriological experiments of Dr. Hance have shown that sixteen out of seventeen buildings that had been inhabited by consumptives for upward of ten years were absolutely free from tubercular infectious material. The patients here are taught the danger to themselves as well as to others from neglecting to take care of their sputa properly. They expectorate into paper cuspidores or into Japanese paper napkins, which are afterwards destroyed by fire. Nothing into which the patient expectorates is used a second time, and the sputum is not allowed to become dry. Sublimate solutions are not proper for the disinfection of masses of sputum. The sputum should be mixed with an equal quantity of a five per cent. solution of carbolic acid. It is very reassuring to know that no patient who has been admitted to this sanitarium with lung disease but without tubercle bacilli having been found, has developed tuberculosis in the sanitarium, and also that not one of the twenty-five attendants have developed the disease in the sanitarium. Of course, an abundance of sunlight and fresh air are considered as most important factors in connection with the management of a sanitarium of this kind. The practice in many country places of keeping the houses darkened most of the time, and but rarely ventilated, Dr. Andrew H. Smith has done well in calling attention to, for, as he very properly says, there are instances on record in which many members of a family have been swept away by consumption under such circumstances as to point very strongly to this kind of house infection, rather than to heredity, as the cause. Quite recently, it is said, some enthusiastic bacteriologist, in his ardent search after "bugs," forgot his reverence for the past, and carried on his quest among some tapestries, much-esteemed heirlooms, that had been hanging in a house for several generations. Fancy his delight, and the horror of the non-scientific portion of the world, when these valued relics of the past were found teeming with the germs of tuberculosis! This reminds me of what Dr. A. Jacobi said about the lowest tenement-houses often not being as unhealthy as the more pretentious cheap flat-houses, for the reason that the halls and stairs of the former were uncovered, while in the latter they were covered with dirty carpet, full of filth and disease.

In a recent discussion before the Surgical Section, the matter of cocaine anesthesia was incidentally touched upon. Dr. J. A. Wyeth said that he had performed many hundred operations under cocaine, and with the exception of a few urethral cases which he had operated upon before he had learned how to use the cocaine, he had never seen any toxic effects from it. His plan was to use a four per cent. solution of cocaine, and to introduce not more than two minims at any one place. As this part was quickly incised, most of the cocaine solution flowed out after such short contact with the tissues that there was no time for the production of constitutional symptoms. He had done most of the common surgical operations under cocaine anesthesia, including operations for appendicitis, and the ligation of important arteries, and he had rarely found it necessary to use more than twenty or twenty-five minims of a four per cent. solution. Dr. B. Farquhar Curtis said that he had done gastrotomy and laparotomy satisfactorily under cocaine. Dr. Willy Meyer said that he did not feel that it was quite safe to use cocaine except when combined with nitroglycerine; Dr. Manley and Dr. Dawbarn preferred to combat the bad effect of the cocaine, in contracting the cerebral vessels, by giving at the same time, an alcoholic stimulant, which also had the advantage of intensfying the analgesic action. Dr. Manley said he had performed major amputations under cocaine with the greatest satisfaction, but he preferred to use a weak solution, and not to exceed a total quantity of one grain.

That somewhat old and worn-out theme, for discussion—"appendicitis"—which continues to bob up as persistently as does antitoxin, was the chief subject for discussion before the Surgical Section the other evening. Dr. Beverly Robinson infused an element of novelty into it by propounding a theory as to its etiology which, if correct, is bound to deprive the surgeons of many operations. He argues that recent anatomical investigations have proved that there is much lymphoid tissue in the vermiform appendix, and that the structure is therefore not unlike that of the tonsils of the throat. It is well known that the latter are very frequently the seat of acute or subacute inflammation, in which an underlying rheumatic element figures quite prominently. It is on this account that the salicylates and guaiacum, and like remedies have gained a reputation in the treatment of tonsillitis. Now, Dr. Robinson proposes to extend this line of therapeutics still further, and apply it to the subacute inflammations of the appendix vermiformis. He has become thoroughly convinced that foreign bodies in the appendix are entirely too rare to account for the very large number of cases of appendicitis, and his own experience has led him to believe that medical men need no longer say in tones of despair that they have "no treatment for appendicitis." In this connection it is interesting to note that Dr. A. E. Gallant, in examining about two hundred appendices for foreign bodies, only found seeds in a single case. There were fecal concretions in other cases, but not true foreign bodies. It should not be inferred from the foregoing that Dr. Robinson claims that by the administration of anti-rheumatic remedies in most cases of appendicitis, all need for surgical interference will disappear, but simply that this appears to be a rational therapeutic procedure, calculated to relieve and cure many cases of appendicitis, so that many of them will recover without resort to operation, as they used to do before we ever heard of "appendicitis."

OGDEN C. LUDLOW, M.D.

2309 *Seventh Avenue.*

I have been led to feel that when the symptoms indicate appendicitis, the combination of a rapid pulse and respiration, going with a temperature normal, or nearly so, points to the necessity of prompt operation.—DAWBARN, *Medical Record.*

IN MEMORIAM—DR. ROBERT BATTEY.

ATLANTA OBSTETRICAL SOCIETY.
ATLANTA, GA., January 15, 1896.

In the recent death of Dr. Robert Battey, of Rome, Ga., the State, the country, and the profession at large have lost one of their most striking and remarkable men. Probably no surgeon of modern times, with the exception of Lister, has left a more radical and enduring impress upon surgical practice. His advent into the field of abdominal surgery occurred at a time when this branch of practice was confined to the then doubtful operation of ovariotomy for ovarian cysts, and when a mortality of twenty-five per cent. was considered an excellent record. At his death the hand of surgery had invaded every organ and every tissue in the abdomen, and the mortality, in the hands of skilled operators, had been reduced below five per cent. This remarkable change can be largely traced to the inception and introduction of Battey's operation. It is doubtless true that the time was ripe for this extension of abdominal surgery. It was in the air, so to speak, and if Battey had not caught the idea some other man would, but this fact in no wise detracts from the originality and boldness of this innovation in surgery. The debt which the profession owes him is therefore to be measured by the advance which abdominal surgery has made in the last score of years.

Dr. Battey's claim to fame is founded upon the operation which bears his name. But, even aside from this, he possessed many of the elements of greatness. He was an indefatigable worker, an eloquent speaker, and a man who had the courage of his convictions. He was withal a modest man, and never sought personal aggrandizement. He forced his operation upon the attention of the profession for its own sake, and not from any selfish motive. With all the honors which came to him in his later years, he was content to live in comparative obscurity in the little town which had been the scene of his earlier struggles, intent only on the good which he might do to his fellow-men. In all the relations of life he was an ideal man, and he lived upon a high plane, which separated him from his fellows without taking him outside of the sphere of their sympathies and companionship. In his death we feel that a great man has departed from among us, and the void which is left is one which will not easily be filled. But his memory will live as long as the profession of medicine remains, and his name will be mentioned along with the greatest surgeons which the world has seen. As long as there are suffering women who seek relief, so long will the name of Battey be held in lasting honor and reverence.

JAMES B. BAIRD, M.D.,
VIRGIL O. HARDON, M.D.,
J. B. S. HOLMES, M.D.,
Committee.

IN MEMORIAM—DR. WILLIAM S. ARMSTRONG.

ATLANTA SOCIETY OF MEDICINE.
ATLANTA, February 18, 1896.

The undersigned committee, by appointment of the President, respectfully submits the following report:

Dr. Armstrong died suddenly, of organic disease of the heart, Tuesday evening, February 11, 1896, in the reception room of the Grady Hospital, at which place he had arrived only a few minutes before for the purpose of attending a regular meeting of the medical board, to the presidency of which he was recently elected. Dr. Armstrong was born in Washington, Wilkes county, Georgia, in 1838. After a liberal preliminary education he commenced the study of medicine under Dr. W. H. Lane, of Washington, and after one course of lectures in Augusta he matriculated in the medical department of the University of New York, and graduated from that institution in 1859. He served with credit to himself as surgeon in the Confederate army from 1861 to 1865. Soon after the close of the war he went to Europe to further prosecute his medical studies, and upon his return home he located in Atlanta and commenced the general practice of medicine. In 1867 he was elected to the chair of Anatomy in the Atlanta Medical College, after having served one year as demonstrator, and he continued to fill that position with distinguished ability to the day of his death. In 1890 Clinical Surgery was added to the chair of Anatomy. He was one of the original members of the surgical staff of the Grady Hospital, and proved in that capacity an ardent and invaluable worker. He was a member and the president of the board of health of the city of Atlanta for fourteen years, until he resigned in 1893, and accomplished extremely valuable results for the sanitary interests of the city during a very important period of its history and growth.

In the practice of his profession he exhibited a strong predilection for surgery. His enthuasism in his work was remarkable and contagious. His earnestness and fidelity was conspicuous and invariable.

During the latter years of his life he performed many of the most intricate and difficult of the major surgical operations, and achieved signal and brilliant results.

His excellence of character, his unselfishness, and his uniform kindness and consideration were universally recognized, and with all of his admirable traits and all of his professional accomplishments he was as modest and unassuming as a child.

His whole life—public, private, religious, and professional—was free from stain. It was marked by faithfulness, honesty, and truth, and should serve as a shining example to those who desire to meet their obligations to their Master and their fellow-men.

JAMES B. BAIRD, M.D.,
W. S. KENDRICK, M.D.,
Committee.

RESOLUTIONS BY MEDICAL STAFF OF GRADY HOSPITAL.

ATLANTA, February 14, 1896.

WHEREAS, In the supreme wisdom of Almighty God, our friend, our brother, and our colleague, William Simpson Armstrong, M.D., has been stricken by the hand of death; and

WHEREAS, The summons from life to the realms of the great hereafter came in a moment, in the twinkling of an eye, and he was snatched, without warning, from the circle of his associates and his comrades, while in the discharge of his professional and official duties, without a pain or a pang to mark the transition from the scenes of his labors and of his triumphs to the regions eternal; therefore be it

Resolved, That in solemn contemplation of the inestimable loss to his family, his profession, and his country, we record our recognition of his worth and of his unwavering fidelity to every obligation, to every truth, and in every relation of life. Yet, in humble submission to the edict of omniscience, with bowed heads and heavy hearts, we yield, unmurmuring, to the divine decree.

Resolved, That in the estimation of those who knew him best he was a christian without hypocrisy, a friend without deceit, a citizen without reproach, a physician without pretense, a man without guile, who, in his active but unostentatious life, illustrated all that is noblest and best in humanity.

Resolved, That these resolutions be furnished the daily papers and the local medical journals for publication, and that our profound sympathies be extended to the family of our brother.

W. S. KENDRICK,
JAMES B. BAIRD,
H. P. COOPER,
Committee.

RESOLUTIONS BY THE FACULTY OF THE ATLANTA MEDICAL COLLEGE.

ATLANTA, February 14, 1896.

WHEREAS, The subject of these resolutions, William Simpson Armstrong, M.D., by the decree of an all-wise providence, died suddenly while presiding at a meeting of the medical staff of the Grady Hospital, February 11, 1896; therefore be it

Resolved 1. That in the death of our beloved and highly esteemed professional brother, co-worker, and friend, the Atlanta Medical College has not only lost one of its strongest supporters, but a most zealous, active, and competent member of its faculty, who discharged every duty devolving on him with all the earnestness and capability that characterized his noble and busy life. Engaged each day with the arduous duties of professiolal work, he never failed to meet promptly every demand made upon him by the institution he loved so well. Plain and simple in manners, unobtrusive and entirely without ostentation, his early medical training and continued study to the end of his career, joined to his fine practical sense, entitled him to the highest place among his fellows, to the unbounded confidence of those to whom he ministered, and to the rich harvest of professional honors he yearly reaped. As a teacher of anatomy and clinical surgery he became distinguished, and throughout all this country stood without a peer. For many years he was a general surgeon of prominence, but some of his recent operations have rendered his name illustrious. Professionally honest, upright, consistent, and a manly man, he was born a gentleman of the old school. Despising the small and unclean things in professional life, he goes down to his grave with a record unblemished, with a name untarnished, and with a life whose ending, touching, sudden, and tragic, has been filled with deeds of love and acts of charity. He died under the very shadow of the institution which he loved so well, and which was a part of the crowning glory of his earthly career. It matters not to the living whether his life-work be recorded on the pages of history, or whether a marble shaft marks the place where he sleeps, for he will still live in the sweet memories of those to whom he so kindly ministered. At his post of duty he died, surrounded by some of his most intimate medical friends. The faculty of the Atlanta Medical College will miss his coming and going, but ripe for the sickle of death, full of years and honors, he has been gathered to his fathers.

Resolved 2. That these resolutions be spread upon the pages of our minute book, and a copy be furnished the family of the deceased, with the tenderest sympathies of this faculty.

EDITORIAL.

The office of the Business Manager of THE JOURNAL is Nos. 311 and 312 Fitten building.

The editors are not responsible for views expressed by contributors.

Articles for publication should reach this office not later than the 15th instant.

Address all communications, and make all remittances payable to THE ATLANTA MEDICAL AND SURGICAL JOURNAL, Atlanta, Ga.

Reprints of articles will be furnished, when desired, at a nominal cost. Requests for the same should always be made *on the manuscript.*

VOLUME THIRTEEN.

This issue is the beginning of our thirteenth volume under the new series. We need not at this time say more to our readers than to repeat the assurances made in the past, that we intend to give them the best journal to be had at the popular price of two dollars per annum. As we have lately made some editorial remarks upon journalism in general, we may now say of this JOURNAL in particular, that it is an independent and fearless medical publication, owned and conducted by regular physicians, and is not the organ or adjunct of any publishing house, medical college, or medical society. No medical journal can afford to be hampered by any such affiliations if it wishes to enjoy the privileges of free and independent action and opinion and to accomplish the full purposes of journalism.

We beg to thank our good friends who have encouraged and assisted us in our management of this JOURNAL in the past, and to request a continuance of their kind offices in the future.

The JOURNAL is in a prosperous condition; our subscription and advertising business increases every year, and we intend to keep it steadily on the up-grade.

DR. WILLIAM S. ARMSTRONG.

On the evening of February 11, 1896, Dr. Wm. S. Armstrong died unexpectedly at the Grady Hospital, just as he was preparing to call to order the Medical Board, of which he was president. Dr. Armstrong was Professor of Anatomy and Clinical Surgery in the Atlanta Medical College, and its Treasurer; President of the Grady Hospital Board; President of the State Anatomical Board, and a member of various medical societies.

If it be granted to those who have passed away to look back upon their lives and into the hearts of those whom they have left behind, he realizes now the good which he did, the reputation which he won, and knows the love which exists in the hearts of his associates here. He had desired to be spared a long and lingering illness, worse than death to one of his energy, but had hoped that the end might come as a sudden summons to leave his labors.

In the institution which he loved well, in the midst of work which was his delight, his face lost its consciousness of earthly things, his ear caught the mandate to cease his labor, and the weary heart gratefully yielded to the call to rest.

It was fitting that he should die at his post, it was merciful that his family was spared the shock of witnessing his sudden taking away, and the manner and time of his death riveted the bonds of his colleagues' affection.

The writer first got to know Dr. Armstrong a little over ten years ago. Work had to be well done, the doing of which was not always practicable; faults were plain, but there was never a word of impatience, never a lapse of courtesy, never a forgetfulness of kindness on his part. At times hasty in his speech, severe in his judgment, and bitter in his condemnation of wrong, he never forgot his honorable character of gentleman. Though of a nervous temperament, with exhaustless energy, his life was well balanced and systematized. He had, as a young man, so many hours for work, so many for study, and so many for rest and social enjoyment.

WILLIAM S. ARMSTRONG, M.D.

Prompt in business, in fact the model of an accurate, perfect business man, prompt at his lectures, prompt in answer to the closing bell—always prompt, no one's time lost through him, his own saved by him.

Long enough with his college to have become a routine member following his work as a treadmill, he did not. To the final moment he was active, progressive, and enthusiastic in his college duties.

Nervous in action and speedy as an operator, few surgeons anywhere can boast of greater success.

He was decided in his "dislikes," more decided in his "likes," true to friends as long as he thought them worthy, appreciative of good, despising evil, and ever above the mean, little, or unprofessional.

His patients and institutions have lost a valuable professional man; his friends have lost one whom they can scarcely replace; those having business with him have lost a model; the profession has lost a leader, and the world has lost a true-hearted, noble gentleman.

His book is closed, his record is made, well-earned peace is his portion. We have parted with him, but his memory will remain, cherished in imperishable affection. M. B. H.

WHAT'S THIS? ANOTHER "CONSUMPTION CURE"?

It may have been noticed that "consumption cures" appear periodically. The proper (?) method of procedure now seems to be, first to "discover" the "cure," next to describe it fully in some medical journal, with the details of its manufacture and its composition made into a Chinese puzzle, next to sell it to a "Chemical Company," and to get it well ventilated in the daily papers. It may then be seen among the advertising pages of some medical journal, with some such pleasing clause as "None but physicians can use it."

The latest discovery, or rather invention, of this character, is announced by one Dr. Cyrus Edson, of New York, late Health Commissioner of that city, and medical expert on various proprietory compounds, rejuvenators, brain coolers, food assimilators, microbe destroyers, etc. The *Medical Record*, of February 8, contained the official announcement by Dr. Edson, under the title "A Rational Treatment for Phthisis Pulmonalis, together with Some Notes of a New Remedial Solution." Of course it was a mere coincidence that the New York *World*, of same date, contained a chance interview with the "discoverer" upon the same subject. We have as yet seen no explanation of the fact that stacks of the *Record* containing this article were offered for sale on public news-stands, while red pasters announced that Dr. Edson's "Cure" was described therein. The name of this great cure is *Aseptolin.* We can but admire the broad philanthropy of the author when he tells us that "The moment I was assured that my experiment was a success I decided to give the results to the entire profession. It is everybody's property, and it may be used in hospitals and anywhere else." He then proceeds to say that "Aseptolin" is simply a mixture of phenol and pilocarpine-phenyl-hydroxide in water. Now we are told that this pilocarpine-phenyl-hydroxide is a "colorless crystalline salt, new to the medical profession," although it is just a combination of pilocarpine with phenol, from which "all the impurities which have hitherto bothered the profession have been eliminated." So that to produce this remarkable "Aseptolin," we have only to take:

Water (H_2O)	97.2411
Phenol (C_6H_7O)	2.7401
Pilocarpine-phenyl-hydroxide ($C_{11}H_{16}N_2O_2OHC_6H_5$)	0.0188

Quod erat faciendum. And there you have it. Could anything be simpler? However, Dr. Edson says that it requires extreme care to make, and that his laboratory assistant could not succeed in producing a satisfactory fluid oftener than once in three times. The dose (hypodermic) is about seventy minims to begin with, increasing ten minims per day until one hundred are reached, which is then retained daily "until the patient recovers." But the virtues of pilocarpine-phenyl-hydroxide are not limited exclusively to the cure of phthisis, though one would suppose that would be honor enough. "My experience with pilocarpine-phenyl-hydroxide in the treatment of *malaria** leads me to consider it a specific, and of even greater efficiency than quinine." Also useful in "*catarrhal and febricular grippe.**" "I confidently believe this method of treatment will afford the best result yet obtained, not only in the cure of phthisis and other forms of tuberculosis, but of other diseases of germ origin. The possible curative range of the fluid is obviously very wide."

The next chapter in this book of discovery may be found in the daily papers, and with this we close:

TO PHYSICIANS IN REGULAR PRACTICE

Will be sent free by mail a sample bottle of Dr. Edson's Aseptolin, the newly discovered treatment for consumption, etc., together with Dr. Edson's paper, reprinted from the *N. Y. Medical Record*, of February 8, 1896. Those who have patients suffering from consumption are urged to test this remedy. None but physicians can use it. Address ——— Chemical Co., ——— St., New York."

ROENTGEN'S DISCOVERY.

Our readers are doubtless already informed, through the daily press, of the wonderful discovery of Professor Roentgen, of Würzburg, Germany, whereby photographs may be made of objects through media which are opaque to ordinary light, such, for instance, as wood, ebonite, flesh, cardboard, leather, etc. The apparatus necessary for this process consists, first, of an induction coil, to the two poles of which is attached a Crooke's vacuum tube. It is the radiant energy from this tube that furnishes the powerful "light" necessary for this photography. The photographic plates are inclosed in a wooden plate-holder, which is placed in a horizontal position, and objects to be photographed are interposed between the radiating Crooke's tube and the plate-holder. In this manner good pictures have been obtained of articles inclosed in wooden or cardboard boxes, and of the bones in a human hand. Bone itself is not translucent to this form of light.

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*Italics ours.

One can easily imagine a number of ways by which this discovery may be made applicable in medical and surgical diagnosis. For the location of bullets, to distinguish between dislocations and fractures, to detect exostoses and osteomata, to diagnose a deformed pelvis, to locate foreign bodies in the alimentary tract or abdominal organs, etc. Indeed, it is said that already renal, vesical, and biliary calculi have been discovered by this means, and pistol balls have been located that resisted all other known means of finding them.

The possibilities which lie undeveloped in this discovery, both in physics and medicine, would seem almost without limit. As a means of facilitating precision in diagnosis it will be most welcome in medicine.

SIX members of the Georgia Boards of Medical Examiners, who were originally appointed for one year from January 7, 1895, have been reappointed, each for a term of three years. They are Drs. J. B. Baird of Atlanta, and W. A. O'Daniel of Milledgeville, representing the regular school. Drs. R. A. Hicks of Rome, and J. Z. Lawshe of Atlanta, homeopathic; M. T. Salter of Atlanta, and W. V. Robinson of Morgan county, eclectic. Dr. Baird has since been succeeded by Dr. J. C. Olmsted.

WE desire to thank our good neighbor, the *Christian Advocate,* for a kind word (February 19): "We have before us the February number of THE ATLANTA MEDICAL AND SURGICAL JOURNAL, published at the Franklin Printing and Publishing Company. A perusal of its contents gives us an appetite for other numbers. It is an able medical journal."

SELECTIONS AND ABSTRACTS.

GENERAL MEDICINE AND THERAPEUTICS.

EDITED BY DR. LUTHER B. GRANDY.

MEDICAL EDUCATION, LEGISLATION, ETC.*

Raising the Standard.—Medical education in this country is now making one of the longest strides forward that has occurred in its history. This step is the lengthening of the course to three and four years of eight and nine months, instead of the old course of two years of four or five months. We say this step is now being taken, for while many schools have already lengthened their courses during the last eight years, there are others which have arranged to do so soon, and still others which are certain to follow along afterwards.† So the work of higher medical education is still in a progressive state, in that many medical schools have not as yet entered upon their full course of instruction, but it is probable that nearly all of the colleges will have completed this extension during the next four or five years. When they have done so, and one can take a retrospective glance and see that every medical school has added one or two years to its course, and has lengthened the annual session to eight or nine months, the question will naturally arise, What was the moving cause of this extension? Why was it that the medical colleges, which for decades had been contented with a course of two years of four or five months each, began to adopt courses of three or four years of eight or nine months each?

In fact, this question has already been answered by several writers, but the explanations must have come from different standpoints, as they arrive at different conclusions. It is said by some that the Illinois State Board of Health was the prime cause, when it announced that no school having a course of less than three years would be considered in good standing and that its graduates could not practice in Illinois without first undergoing an examination. Others say that the medical practice acts adopted in several States during the last five or six years began the work; others attribute it to the resolutions of the American Medical College Association in favor of higher education; others claim that "it was inaugurated by the American Institute of Homeopathy in 1888, when it was ordered that 'After the college sessions of 1890–91 each and all of the homeopathic schools of America will require of their candidates for graduation at least three years of medical study, including three full courses of didactic and clinical instruction of at least six months each.'"

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*From advance sheets of the Report of Commissioner of Education. Compiled by A. Erskine Miller.

†The Association of American Colleges, at its meeting in San Francisco, June 7, 1894, "*Resolved*, That students graduating in 1899 or subsequent classes be required to pursue the study of medicine four years and to have attended four annual courses of lectures of not less than six months' duration each."

It is probable that many of the leading medical institutions had for some time been in favor of extending the course, but were deterred from fear that their students would leave for competing colleges where less time was required. But when some of the institutions which constituted departments in heavily endowed universities became less dependent upon tuition fees, they were able to adopt longer courses without considering its effect upon attendance. Besides, about this time the number of medical students was becoming unusually large, so that some schools did not really desire an attendance larger than they could well accommodate. By adopting a longer course they would still have as many students as desired, and they would send out graduates better prepared to gain credit for themselves and for the institution.

Many of the State Boards of Health now announce that they will not recognize any institution unless it exacts a full three years' course of study and complies with all other standard requirements of education.* One of the results likely to follow from this elevation of the course is that there will be fewer new colleges coming into existence, for unless an institution has a good standing with the State Boards of Health or examining bodies, it cannot reasonably expect to meet with much success. But, as the present number of medical colleges will be ample for many years to come, no complaint will be made because others cannot come into existence. In fact, medical education would be advanced if some institutions already existing were consolidated with others in the same locality.

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*Since the above was written the regulations have been made still more stringent. In Oregon, Montana, and Minnesota after 1898 an attendance of four courses of lectures will be required.

"The chief difficulty in making a high standard universal lies in the number of the medical colleges. It is, indeed, a sorry admission that the medical schools in this country are the greatest enemy to medical progress, not in themselves, but in their number. . . . The remedy lies in their amalgamation. Let the absurdity cease of small towns having three, four, or six of these struggling institutions, no one of which can have a vigorous life.

"There is now all over the country a growing disposition for the universities to take charge of medical teaching and to develop their medical departments with all the zeal they give to the others. We see it in Michigan; we see it in California and Colorado; we see it in Louisiana and Texas as strikingly as in our Eastern States. There is nothing but good in this. The power, the means, the spirit of the university go out to its branch; the university in turn gains by the reputation of its medical faculty, and by the recognition that medicine is an essential part of the new learning which leads on to the highest attainable civilization."*

Effect on Attendance of Lengthening the Course.—The question may be asked, How has the attendance of students been affected by the requirement of another year of study? Adding one year to the course means not only increasing the amount of time required, but also an increase in the financial outlay. It would therefore naturally be expected that many young men would be led to seek other lines of employment. In order to determine this question somewhat definitely the statistics for the last five years have been collected of medical, dental, pharmaceutical, and law students, as all of these have had lengthened courses. Instead of any decrease, however, we find the number of students to have grown steadily larger. In 1888–89 the number of medical students was 15,029; since that time the number has gone steadily forward to 19,752 in 1892–93. As yet even the number of graduates has suffered no special loss, except in the dental schools, where the number of graduates in 1891–92 was 1,282, and fell to 507 in 1892–93, when the graduating class first encountered the three-year regulation.

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*Dr. J. M. Da Costa, of Philadelphia.

Although the actual number of students in attendance during the last five years has regularly increased, it is still very probable that many have been kept out by the lengthened course.

Legal Control of the Practice of Medicine.—Unless it be the American Medical College Association, probably nothing has contributed so much to the advancement of medical education in the United States as the establishment of State licensing boards, frequently called boards of health on account of a union of their functions. Here we see how far-reaching and important a little clause sometimes becomes, in a law which directs the licensing boards to register all graduates "of colleges in good standing." Probably no one of the legislators who first voted for the bill containing these words, now found in the law of several States, had any idea of what a powerful leverage they would become in the hands of State licensing boards for stimulating medical colleges to lengthen their course of study and raise the requirements for entrance and graduation. But when the Illinois State Board announced that no medical school would be regarded in good standing which did not require three courses of lectures, the institutions immediately began to fall into line in lengthening their courses, for in truth many schools had favored such an extension before, but were deterred from taking the step because their competitors did not adopt it. Now, however, they recognized the fact that all schools would soon be compelled to advance their standards. This valuable work of State licensing boards was soon recognized in other States, and now we find such boards in thirty-five States and Territories, all of them contributing to a large extent in placing medical education upon a plane where it will reflect honor upon its followers.

It was not many years ago when, in almost any State in the Union, any one could hang out his sign as a medical practitioner and charge as high fees as the best qualified physician in the town. Why, then, should one spend several years in preparing for his work and deplete his purse with the hope of being able to refill it again? It might be said that the meritorious physician would be able eventually to show beyond doubt his qualifications, while the half-educated doctor would be unable to hide his mistakes. That is true to some extent, but the latter generally is able to recognize this fact himself, and when the truth begins to reveal itself to the people, he quietly moves off, possibly to another section of the same city, and begins to plod his old course in a country new. The meritorious doctor then sees that what he expected has taken place, but as a vacancy has occurred, another one soon moves in who has possibly bought out the good will of the departing brother, and then perhaps begins again the identical course of events. Besides, medical knowledge and skill do not alone determine a physician's success; there are other things that help to decide it. An air of self-confidence, a good personal appearance, a cheerful and sociable disposition, and a happy faculty for making acquaintances go far toward securing a reputation as an able physician, and if united with a good degree of dependence on *vis medicatrix naturæ,* he may enjoy many happy days of visiting patients, drawing a veil over ill-timed prescriptions, collecting good fees, and receiving high encomiums from warm-hearted friends.

It may be said that the well qualified physician should also endeavor to possess these external requisites, that they are really as essential in restoring health to the invalid as a well selected prescription; but that is no reason why they should constitute the stock in trade; no reason why the confiding patient should be left to chance or to nature when by the administration of the proper medicine, convalescence would at once begin. But, above all, that is no reason why, so far as can be avoided and when perhaps a life is in danger, dependence should be had upon some one supposed to possess both knowledge and skill, when in fact he has neither. This only illustrates the ease with which deception can be practiced in the healing art, and why the governments of Europe and so many States of this country have adopted regulations to secure at least presumptive evidence that medical practitioners are qualified for their responsible duties. The people have not sufficient time, as individuals, to examine into the qualifications of physicians, to say nothing of the opportunities and knowledge necessary to properly determine such a question. Frequently it is not until some member of the family has been suddenly taken sick that the question arises what physician shall be called, and the query is quite often determined by hurrying to the first drugstore and inquiring of the clerk for the nearest physician.

There are eighteen States in which the diploma of no medical college confers the right to practice, but all candidates for this privilege must undergo an examination. These States are Alabama, Arkansas, Florida, Georgia, Maryland, Minnesota, Mississippi, New Jersey, New York, North Carolina, North Dakota, Pennsylvania, South Carolina, South Dakota, Texas, Utah, Virginia, Washington. In seventeen other States the diploma confers this right only when the board of health or other determining body shall have declared the college to be "in good standing," and this has been interpreted to mean that they are satisfied with the entrance requirements, the length of the term, the number of courses required before graduation, the character of the instruction given, and all other items which aid in fully qualifying the graduate to practice. In some instances State boards have announced in advance that they would recognize no college which did not require so many courses of lectures, or which did not have an annual session of so many months. Medical institutions would then see that they must comply with these requirements or else their graduates from such States would be on unequal footing with those from other schools, and consequently the number of their students would be diminished. In self-defense, therefore, they must comply with all reasonable stipulations.

"A conspicuous effect of these laws has been seen in the improvement of the standard of medical education. To them, more than to any one cause, is due the difference which exists between the condition now and in 1870. In Alabama, Colorado, Connecticut, Illinois, Nebraska, Oregon, South Dakota, and Washington, at least three full courses of five to six months each, no two in the same year, are demanded. The State of Oregon, after 1898, will require four courses of six months each from physicians who wish to practice in that State. There is not only a prolongation of the period of study as the effect of these laws, but there is also an increased demand for a preliminary education, the establishment of new professorships, and more exacting examinations for the degree." (R. H. Fitz, M.D., Boston.)

Legal Requirements for the Practice of Medicine in the United States.

States and Territories.	Requirements.
Alabama	Examination by State or county board of medical examiners.
Arizona Territory	Registration of diploma.
Arkansas	Examination by State or county board of medical examiners.
California	Diploma of college "in good standing."*
Colorado	Do.
Connecticut	Diploma of college "recognized as reputable by one of the chartered medical societies of the State."
Delaware	Diploma of "a respectable medical college."
District of Columbia	Diploma, but practically no requirements.
Florida	Examination by State or district board of medical examiners.
Georgia	Examination by State board after showing diploma of a college requiring three years of six months.
Idaho	Diploma.
Illinois	Diploma of college "in good standing."
Indiana	Diploma.
Iowa	Diploma of college "in good standing."
Kansas	Diploma.
Kentucky	Diploma of "a reputable college."
Louisiana	Diploma of a "medical institution of credit and respectability."
Maine	Law recently passed; requirements not known.
Maryland	Examination by State board of examiners.
Massachusetts	Diploma.
Michigan	Do.
Minnesota	Examination by State board of examiners.
Mississippi	Examination by State board of health.
Missouri	Diploma of college "in good standing."
Montana	Do.
Nebraska	Do.
Nevada	Diploma.
New Hampshire	No legal requirement.
New Jersey	Examination by State board of examiners.
New Mexico Territory	Diploma of college "in good standing."
New York	Examination by State board of examiners.
North Carolina	Do.
North Dakota	Do.
Ohio	Diploma.
Oklahoma	Diploma of college "in good standing."
Oregon	Do.
Pennsylvania	Examination by State board of examiners.
Rhode Island	Diploma "of a reputable and legally chartered medical college, indorsed as such by the State board of health.
South Carolina	Examination by State board after presentation of diploma.
South Dakota	Examination by State board of health.
Tennessee	Diploma of college "in good standing."
Texas	Examination by a district board of medical examiners.
Utah Territory	Examination of Territorial board.
Vermont	Diploma.
Virginia	Examination by State board of examiners.
Washington	Do.
West Virginia	Diploma of "a reputable college."
Wisconsin	Diploma.
Wyoming	Do.

In twelve States and Territories it is required only that the candidates for licensure shall present a diploma from some medical school; no question being asked, as to the character of the instruction given in the school. This opens a wide door to dishonest evasions of the law, and the traffic in fraudulent diplomas flourishes in consequence. The registrar of medical practitioners frequently has practically no information as to the medical schools of the country, and makes no pretense to examination of the diplomas. But another serious defect in many States is that little or no effort is made to see that unregistered physicians do not practice. The law is left to enforce itself.

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*The words "in good standing," as interpreted by the State boards of health and boards of examiners, refer only to those colleges whose regulations comply with the conditions established by these boards.

An act to regulate the practice of medicine and surgery was lately passed by the legislature of Maine, but its requirements have not yet been ascertained. This leaves New Hampshire as the only State in the Union with no medical-practice law, which it will soon have to enact in self-defense.

In several other States the laws on this subject are of very recent date, showing that the trend of legislation is strongly toward safeguards against incompetent practitioners. In Pennsylvania an act was passed May 18, 1893, to take effect March 4, 1894, requiring an examination before a State board of examiners. In Connecticut the law regulating the practice of medicine only went into effect October 1, 1893, and in Nebraska it was enacted in July, 1891. In South Carolina the law requiring an examination was repealed December 24, 1890, but was re-enacted in December, 1893. The laws of Georgia, Rhode Island, and Maine are of still more recent enactment.

Study under a Preceptor.—A few years ago, when nearly all medical colleges had a course of only two years, of four or five months, it was generally stated in the catalogues that the student would be required to spend one year under a preceptor before he could matriculate; and this would have been of much value to him if it was spent under proper direction and attention; but unfortunately those physicians who were most competent to direct his work were generally so engrossed with other duties that they had little time to devote to the medical student. The latter soon recognized the fact that his time was not being well spent, and that he must look after his own interests; consequently he usually spent only a few months, or perhaps weeks, in the study of anatomy, aided only by a few bones which had been hidden away in his preceptor's office. He then went to some medical college where he felt confident he could complete the course in a brief period, registered his name, age, and residence, and the name of his preceptor, paid his matriculation fee, and began to attend the same lectures as those who were soon to complete the course. He soon recognized, however, that he labored under difficulties, for he was nonplussed at the terms spondylolisthesis, symphyseotomy, colporraphy, oöphorectomy, sponge tents, etc., but when he spoke of it to his fellow-students they allayed all fears by telling him he would hear exactly the same thing the next year and would then understand it.

Now that the medical schools have adopted graded courses of three and four years, and the student is led along in his work in an orderly and systematic manner, he is no longer required to spend any time under a preceptor, for it is well known that his time could be far better employed at the institution; in fact the time in a preceptor's office is wasted. "According to Dr. N. S. Davis it (reading medicine in a doctor's office) consisted, in 1877, in little more than the registry of the student's name in the doctor's office, permission to read the books of his library, or not, as he chose, and the giving of a certificate of time of study for the student to take to the medical college when he expected to graduate."

DRY DRESSING FOR THE NAVEL CORD.

Dr. E. A. Tucker says he has seen several cases illustrative of the remarkable fact that pathogenic bacteria entering by the umbilicus may pass over certain viscera and ultimately find a lodgment in some remote part, as in the meninges. The only effective treatment for these infections in the new-born is a prophylactic one, and this consists in carefully dressing the umbilicus with a dry, clean powder. Dr. J. H. Fruitnight said that in the earlier years of his practice, when moist dressings for the cord had been in vogue, he had seen suppuration of the umbilicus much more frequently than since he had adopted the practice of using dry dressings. Several other speakers expressed similar views regarding the efficacy of this treatment of the navel.—*Pediatrics, January* 1, 1896.

MEDICAL ITEMS.

WE regret to chronicle the illness of our friend Dr. J. N. Tanlunson, and hope he will soon be restored to health.

DR. JAMES N. ELLIS, of Richmond, and Miss Leila Venable, of Atlanta, were married in Atlanta February 12th.

WE direct your attention to the special course at the Chicago Polyclinic and Hospital. For particulars see their advertisement.

THE *Clinical Recorder* is the name of a new quarterly journal to be published in New York, and edited by Dr. W. S. Gottheil. The first number contains some good articles, but the mechanical execution is miserable.

THERE will be a meeting of the alumni of the Atlanta Medical College, in the college building, at 12 o'clock March 31, for organization of a permanent Alumni Association. All alumni of the college are urged to be present.

THE papers announce the death of a lady in Chattanooga, February 18, from chloroform inhalation. She was about to be operated upon for some growth on the jaw, but died in few minutes after the anesthetic was begun. "Heart failure" is assigned as the cause of death.

CONGRESS has been requested to make an appropriation for a revised edition of the *Medical and Surgical History of the War of the Rebellion*. This elegant work has long been out of print. Write to your Congressman and ask his influence for this work. There should be another edition.

THE Apollinaris Company have kindly sent us some samples of the new Hunyadi water, which they are introducing under the name of *Apenta.* The chemical formula shows it to be principally a strong solution of sulphate of soda and sulphate of magnesia, the latter predominating.

THERE is a movement on foot to form a "National Confederation of State Examining and Licensing Boards," with the purpose "of reciprocal interstate action on the part of the State examining boards." Dr. Charles McIntire, of Easton, Pa., is chairman of the committee, and invites correspondence.

P. BLAKISTON, SON & Co., of Philadelphia, announce a book on "Appendicitis," by John B. Deaver, M.D., Assistant Professor of Applied Anatomy, University of Pennsylvania; Assistant Surgeon to the German Hospital, etc. The book will be arranged in a practical and systematic manner. The History, Etiology, Symptoms, Diagnosis, Operative Treatment, Prognosis, and Complications of this disease will be given in the order named. It will contain about forty illustrations of methods of procedure in operating, and typical pathological conditions of the appendix, the latter being printed in colors.

WE said in a late issue that we intended to publish the names of druggists known to be guilty of substitution. We have been furnished with the following:

Stegner Drug Co., cor. Grand and Easton avenues, St. Louis.
J. W. Crain, 75 West Madison avenue, Chicago.
International Pharmacy, 422 South Clark street, Chicago.
Merz Bros., southwest cor. Twelfth st. and Ogden ave., Chicago.
Richard Jentzsch, Twelfth and Ogden ave., Chicago.
Stolz & Grady, 104 North Clark ave., Chicago.
Charles H. Schad, 344 East Washington street, Indianapolis.
Charles S. Hayer, Fifth ave. and York street, Louisville.
E. Kampfmueller, Seventh and Broadway, Louisville.

MEDICAL boards should look out for diplomas and graduates of the "Illinois Health University." The business of this so-called university is chiefly to sell medical degrees without any sort of examination or qualification. The institution is located in Chicago, and it is said to advertise especially in the Detroit papers.

WE regret to learn of the death of Professor Joseph Jones, of New Orleans, which occurred February 19. Dr. Jones was born in Liberty county, Georgia, in 1833. In 1853 he graduated with distinction at Princeton College, and two years latter received his medical diploma from the medical department of the University of Pennsylvania. In 1856 he became Professor of Chemistry in the Savannah Medical College, serving two years, when he was elected Professor of Chemistry and Geology in the State University at Athens. The next year he was called to the chair of chemistry in the Medical College of Georgia at Augusta, which position he filled with great credit until the war. After one year as surgeon to several cavalry organizations in Georgia he was commissioned full surgeon in the Confederate army in 1862. He moved to New Orleans in 1868, and become Professor of Chemistry in the Universty of Louisiana, now Tulane University, and he has continued in this position since that time. Dr. Jones was a tireless worker and a voluminous writer on medical and scientific subjects. In 1876 Dr. Jones began the publication of his "Medical and Surgical Memoirs," containing valuable papers relating to the causes, nature, and management of various diseases, especially epidemic and contagious diseases, and a full exposition of the quarantine and sanitary laws necessary for the control of these diseases. In late years Dr. Jones has been President of the Louisiana Board of Health, and during his term of office the quarantine and sanitary regulations which he instituted succeeded in excluding yellow fever from the region of the lower Mississippi. Dr. Jones was one of the most learned men in our profession, and his reputation and labors were known on both continents. He died in his sixty-third year, esteemed and honored by all his contemporaries.

A GEORGIA MEDICAL POET.—We are indebted to Mr. Joel Benton (*Collier's Weekly*, October 31 and November 7, 1895) for some interesting information concerning Dr. Thomas Holley Chivers, a Georgia physician and poet, who lived, practiced medicine, and wrote poems in this State about sixty years ago, and whom the writer styled the "Precursor of Poe." More than this, however, little seems to be now known of Dr. Chivers. Many of his poems show the same effect of rhyme and meter that characterized the prettiest of Poe's poems about the same time or later. We give two stanzas from the "Vigil of Aiden," a poem covering twenty-six pages:

In the rosy bowers of Aiden,
With her ruby lips love-laden,
Dwelt the mild, the modest maiden
Whom Politian called Lenore.

* * * * *

For her lily-limbs so tender,
Like the moon in her own splendor
Seemed all earthly things to render
Bright as Eden was of yore.

* * * * *

Then he cried out, broken-hearted,
In this desert world deserted,
Though she had not yet departed,
"Are we not to meet, dear maiden,
In the rosy bowers of Aiden,
As we did in days of yore?"
And that modest, mild, sweet maiden,
In the rosy bowers of Aiden,
With her lily lips love-laden,
Answered, "Yes, forever more!"
And the old-time towers of Aiden
Echoed, "Yes, forever more!"

BOOK REVIEWS.

The Pathology and Surgical Treatment of Tumors. By N. Senn, M.D., Ph.D., LL.D., Professor of Practice of Surgery and Clinical Surgery, Rush Medical College; Attending Surgeon of Presbyterian Hospital; Surgeon in Chief, St. Joseph's Hospital, Chicago. Illustrated by 515 Engravings, including full-page Colored Plate. Philadelphia: W. B. Saunders, 925 Walnut street.

Upon a careful reading of this work the impression is left that a vast deal of labor and research has been expended in its preparation. The great preponderance of data from foreign sources would indicate that comparatively little attention has been given here by surgeons to this kind of investigation, or that the author has overlooked their claims to his consideration. In a few instances it appears that home talent is not appreciated.

Taking a general view of the scope of this book, one is reminded of the announcement made by a speaker to his auditory, that he would treat of matters at the outset that they knew more about than he did; secondly, he would treat of matters that he was far better acquainted with than they were, and lastly he would discuss things that neither they nor he understood.

It is evident that surgeons who make any pretensions to familiarity with the gross features of tumors and have studied their macroscopic points with care, as many have done who undertake to teach surgery, will receive but little benefit from the general description of the different forms of tumors given in this work. Indeed, it may be justly claimed that, collectively, this class of readers know more about the characteristic outlines of tumors than the author has given in this volume.

On the other hand, the unmistakable evidence presented in this volume of the author's intimate acquaintance with the minute structure of tumors as revealed by the microscope and other means of investigation, places him in advance of others in knowledge of the organic elements of tumors. The failure to give the profession more light upon the ways and means of conducting these investigations, so as to arrive at correct conclusions, ought to be remedied in a future edition.

In regard to the origin of tumors not being in any way connected with the influence of bacteria, the position of the author is so widely at variance with his attitude as to the rôle of micro-organisms in nearly all inflammatory processes, that he is to be congratulated in excluding them from all participation in the etiological factor of tumors.

But just at this phase of development comes the great obstacle to a scientific explanation of the origin of neoplasms, and after all the elaborate investigations of original workers the profession is expected by the author to accept a theory, which is equally incomprehensible to writer and reader.

After considerable labor in connection with this whole matter, some years ago by the writer, it was found that no more expressive definition could be given than this: "A tumor is an abnormal development of tissue independent of the ordinary results of inflammation." Whether the cell-division theory or that of Conheim may be accepted, there is no practical advance made in comprehending the development of tumors. Hence, it is a fair deduction that the author finds a problem as to etiology which is unintelligible to all concerned. His definition is, however, stated very emphatically, that "a tumor is a localized increase of tissue, the product of tissue-proliferation of embryonic cells of congenital or post-natal origin, produced independently of microbic causes."

The division of embryonic tissue into epiblast, hypoblast, and mesoblast, is made to aid the student in comprehending the location and structure of tumors. The author has classified under the general heading of epiblastic and hypoblastic tumors: papilloma, adenoma, cystoma, and carcinoma; under that of mesoblastic tumors: fibroma, lipoma, myxoma, chondroma, osteoma, angioma, lymphangioma, lymphoma, myoma, neuroma, and sarcoma; under combinations of the above comes terratoma, and he closes with retention cysts.

The elaborate and exhaustive consideration of each of these topics, with numerous illustrations, sustains the reputation for exactness and thoroughness which the author has established by his previous publications.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by Thomas L. Stedman, M.D., New York City. In twenty volumes. Volume VI. Diseases of the Respiratory Organs. William Wood & Company, 45–47 East Tenth street, New York.

The sixth volume of this excellent work appears ahead of the fifth on account of some unavoidable delay in receipt of manuscript for the latter. The volume before us is devoted to diseases of the respiratory tract, and these are treated of in a very complete and satisfactory manner. The opening article is naturally one upon the "Diseases of the Nose." This is from the pen of Dr. Prosser James, of London, the possessor of a graceful literary style, who has given us one of the most readable articles in the book. Following this is an article on the "Diseases of the Accessory Sinuses of the Nose," by Dr. Jonathan Wright, of Brooklyn. Two articles, one on "Diseases of the Naso-Pharynx and Pharynx," and the other on the "Diseases of the Tonsils," are by Dr. E. J. Moure, of Bordeaux, who is recognized as the leading French authority on affections of the upper air passages. Dr. A. H. Buck, of New York, treats of "Diseases of the Ears," in his usual clear and easy style. Proceeding downward, we come to the "Larynx," the diseases of which are handled in a very satisfactory manner by Dr. F.H. Bosworth, of New York. All of the affections of the upper air passages just mentioned are treated from the point of view of the general practitioner rather than from that of the specialist. Sir Thomas Grainger Stewart and Dr. George A. Gibson, of Edinburgh, have written in collaboration upon the "Diseases of the Trachea and Bronchial Tubes," the result of their combined labors being an excellent treatise on the pathology and treatment of these harassing complaints. The author of the concluding article is Dr. Winslow Anderson, of San Francisco. His subject is the "Diseases of the Lungs," except tuberculosis and croupous pneumonia, two affections which will be considered in a later volume along with the other infectious diseases.

As regards both the interest of the subjects here treated and the authority of the writers, this volume will compare favorably with any of its predecessors. "Diseases of the Skin" will form the contents of the next volume.

THE AMERICAN YEAR-BOOK OF MEDICINE AND SURGERY. Prepared and arranged by eminent American specialists and teachers, under the editorial charge of George M. Gould, M.D., Philadelphia. Illustrated with numerous wood-cuts, half-tones, and colored plates. Price, cloth, $6.50. Published by W. B. Saunders, 925 Walnut street, Philadelphia.

This book has been prepared by the contributors and publisher from the desire to furnish the general physician with a carefully-made epitomization of the most important current journalistic literature for the year ending June 30, 1895. The object has been to include only what is new, new ideas of medical treatment and new methods of surgical practice. Among the contributors are such well-known names as William Pepper, W. W. Keen, Louis Starr, V. P. Gibney, C. H. Burnett, Archibald Church, W. A. Hardaway, and others, and the subjects discussed and brought down to the date named are, General Medicine, Surgery, Obstetrics, Gynecology, Pediatrics, Nervous Diseases, Dermatology, Orthopedics, Ophthalmology, Otology, Rhinology and Laryngology, Pathology and Bacteriology, Materia Medica and Therapeutics, Anatomy and Physiology, and Hygiene and Chemistry. All the important literature bearing on these subjects has been carefully gone over and digested, and due mention has been made of all distinct progress in our medical and surgical knowledge and technique. The contributors have made an eminent success of this work, and we think it will be read with interest and profit by all subscribers. The fine editorial hand of Dr. Gould is well apparent throughout the book.

COLOR VISION AND COLOR BLINDNESS. A Practical Manual for Railroad Surgeons. By J. Ellis Jennings, M.D., University of Pennsylvania. The F. A. Davis Company, Publishers, Philadelphia, Pa.

This little book has just been issued from the above publishing house, and Dr. Jennings has put in a very clear and practical form just those points about color vision and blindness which are most needed by the student of ophthalmology. One of the incentives for writing this book is given by Dr. Jennings in his preface: "The methods now employed have proven practical and efficient, and there is every reason to believe that all the railroads in this country would take measures to weed out the color-blind from the service if the frequency and dangers of this affection were brought to their notice. It is with the hope of stimulating further effort in this direction that this manual has been written."

The rules regulating the employment of men whose vision and color perception have been thoroughly tested are much more strictly carried out by the management of the large Northern railroads than is found here in the South. For instance, on the magnificently regulated Pennsylvania railroad, no man can be employed whose vision for color perception is defective. It is certainly not due to the fact that our Northern brethren value human lives more than we of the South that such a provision is made for the safety of railroad travel, but either through ignorance or a miserly desire to reduce every expense, there is scarcely any regulation among the railroads in this section for any examination whatever of their employees in regard to vision or color perception. In some States there are laws regulating railroads in regard to this point, and we sincerely trust that such a movement may prove more universal. For oculists, consultants to railroads, where such regulations are demanded, the little book of Dr. Jennings will prove a safe and valuable guide. D. R.

THE HISTORY OF ANESTHESIA. By William R. Hayden, M.D., Bedford Springs, Massachusetts. Price 25 cents. [Reprinted from the *International Journal of Surgery*.]

The author begins this brochure by saying that in presenting the important facts bearing upon the discovery of anesthesia, he will put forth an "honest effort to be impartial and just, as the truth demands." In spite of such an avowed purpose he has given a distorted and one-sided story, in which W. T. G. Morton appears as the particular hero, and the claims of Long and Wells and Jackson to part of the credit of this discovery are repudiated as unworthy of consideration. Dr. Hayden's mind has never been easy since it has been proven beyond question that Dr. Long, of Georgia, was the first to employ surgical anesthesia by ether in 1842. Within the last two years he has written seven or eight journal articles in the interest of Dr. Morton, and we have reason to believe that the end is not yet. *Quousque tandem, Catilina, abutere patientia nostra.*

But not all the prejudice and false logic of Dr. Hayden, nor the interpretation which he is pleased to place upon the work and motives of Dr. Long can eradicate the single fact that the latter was acquainted with the anesthetic properties of sulphuric ether and had several times operated thereby four years before Dr. Morton ever thought of it. All of the claimants to the credit of the discovery of anesthesia have had their cases fully presented, and upon the data thus presented the final judgment will be made up, awarding each claimant his proper due.

DON'TS FOR CONSUMPTIVES, OR THE SCIENTIFIC MANAGEMENT OF PULMONARY TUBERCULOSIS.

This is the title of a book which, under the authorship of Dr. Charles Wilson Ingraham, will soon be issued by the Medical Reporter Publishing Co. of Rochester, N. Y.

The complete work of thirty-five chapters is devoted exclusively to the general management of Pulmonary Invalids, no reference whatever being made to drug treatments.

The object of the author is to supply the physician with a practical work, and at the same time, by eliminating technical terms, reduce the text within the easy comprehension of the intelligent patient. The author claims that "a good understanding of his condition is the best remedy for the consumptive." With this book in the hands of his patient, the physician will be relieved of a multitude of details which attach to the successful management of such cases. Special attention has been given those chapters pertaining to the destruction of tubercular infection.

The book will be printed on 72-pound antique book paper, bound in cloth (imitation morocco), with title in gold leaf. Price, $1.75.

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ORIGINAL COMMUNICATIONS.

A BRIEF HISTORY OF OTOLOGY FROM ITS INFANCY TO THE PRESENT TIME.

BY T. E. MITCHELL, M.D.,
COLUMBUS, GA.

Perhaps no branch of medical science has been longer in receiving the consideration its importance merits than has that of otology, or, the knowledge of the anatomy, physiology, and pathology of the ear. While this is true, it is likewise a fact that the earliest physicians prescribed for diseases of the ear, notwithstanding their remedies were for the most part empirical and irrational.

Hippocrates, who died 357 B.C. and who was seventeenth in descent from Æsculapius himself, had an indefinite knowledge of the membrana tympani, and considered all internal inflammations of the ear as inflammations of the head. He recognized pain in the ear accompanied by high fever as a very dangerous malady, which usually terminated in the death of the patient in about ten days unless pus escaped from the ear or blood from the nose. In constitutional troubles Hippocrates regarded sweet ear-wax as an unfavorable symptom. Among the many strange preparations which he instilled into the ear for the relief of pain, we find a very efficient one in warm water, though it is probable that he knew nothing of the rationale of its anodyne properties. Alcmeon, who lived about 530 B.C., was probably the first man to dissect the human cadaver, and is said to have known something of the ear and Eustachian tube. Aristotle (385–322 B.C.), a pupil of Plato, was not only a philosopher, but an anatomist as well. Much of his more mature life was spent with a tenaculum and scalpel in making anatomical investigations on animals. He had an indefinite idea of the myringa and Eustachian tube. Popular remedies at this time were burned opium and castoreum for earache, and bitter almond oil for living creatures. Asclepiades, a contemporary and friend of Cicero, advised instillation of oil in which cockroaches had been cooked, and this to be followed by woman's milk. Celsus, a Latin physician, who practiced during the reign of Augustus, prescribed indiscriminately a remedy composed of cinnamon, cassia, castoreum, white pepper, ammonia, myrrh, and saffron, rubbed up and diluted with vinegar, for all ear diseases. Celsus was probably the first to suggest the removal of foreign bodies from the ear by vigorous injections of water. In obstinate cases which did not yield to the method above named he recommended an alternative no less ingenious than unpleasant to the patient, who was to be laid on a table with the affected member down, whereupon the physician should strike the table with a hammer, hoping to dislodge the body by concussion. Archigenes, who lived about this time, recommended the local application of hot water, purgative enemas, and venesection for aural pains. To remove a foreign body from the ear of a child, he suggested that it be held up by the feet and given a vigorous shake, while adults should be treated in a similar manner to that recommended by Celsus. He was probably the first to suggest the use of speaking tubes for the deaf. Rufus, who practiced in the historic city of Ephesus in the first century, gave to the different parts of the auricle the names of helix, lobe, tragus, and anti-tragus, which names have been retained.

Galen (A.D. 130–201), the most celebrated physician of his time, was an elaborate writer, but added little or nothing to what was already known of the anatomy of the ear. Galen made an extensive classification of the diseases of the ear, and countless remedies were among his therapeutic resources. Among these were wolf's milk, the fat of geese and hens, or, when the pain was severe, a mixture of opium, musk, and the white of an egg. From the time of Galen (A.D. 200), very little or nothing was added to the indefinite and superficial knowledge of the anatomy of the ear till the sixteenth century; but much was written of aural therapeutics, most of which was based on ignorance, superstition, and empiricism. A marked exception to the popular remedies of the time was found in the teachings of one Aurelianus, who lived after Galen and who suggested the use of leeches, cups, sinapisms, etc., for pain in the ear. Some of the strange and unreasonable things that were poured into the ear for various troubles were, frog's fat for pain, the renal secretion of pigs, men, or children, and the blood of young chickens, for an ulcer. A great deal was written of living larvæ in the ear, the frequency of their occurrence being probably due to neglected or improperly treated suppuration of the middle ear. For this trouble the saliva of a hungry man was a favorite prescription. For deafness, a popular prescription was a lion's brain mixed with oil, and one disciple of Æsculapius found an efficient remedy for the earache of children in woman's milk, provided, however, that the milk be that of a woman nursing a female infant, in case the patient be a boy, and *vice versa* if it be a girl. For 1,300 years immediately subsequent to Galen's time no progress was made in otology, and those who practiced during this time groped in a darkness of ignorance, superstition, and empiricism only to leave this branch of medical science in as undeveloped a condition as they found it. During the sixteenth century, however, great strides were made in anatomical researches of the ear, and a more perfected knowledge of its parts was handed down to subsequent investigators.

Vesalius (1514–1561), a learned anatomist, described the vestibule, the semi-circular canals, and the small tube connecting the tympanic cavity with the pharyngeal space.

Eustachius (1510–1574), an Italian anatomist, discovered the tensor tympani and stapedius muscles, as well as to describe more clearly the tube which bears his name, thus perpetuating his memory in anatomical nomenclature.

Fallopius (1523–1562), likewise an Italian anatomist, explained the communication of the tympanic cavity with the mastoid cells, described the fenestræ ovalis and rotunda, as well as the canal (aquæductus Fallopii) which bears his name and through which the facial nerve passes. It was about this time that the ossicula auditus was discovered.

Among other and less famous anatomists who contributed to our knowledge of aural anatomy about this time were Ingrassias, Colombo, Casserius, Stenon, and Du Verney. Valsalva spent sixteen years of his life in the study of otology, and in this time dissected more than one thousand heads. As a result the eighteenth century was a great era in aural anatomy. Valsalva was soon followed by Scarpa (1747–1832), who took up the chain of anatomical investigation where his predecessor had left it; and so exact were his descriptions of the structure of the inner ear that his contemporaries thought little else was to be done. Bivinus, Casselbohm, Zinn, Brendel, Monro, and Cotugno were also contemporary anatomists of this time, and helped to complete our knowledge of the ear's mechanism. Cotugno was the first to show that the labyrinthin fluid was essential to sound perception.

Morgagni (1682–1771), the founder of pathological anatomy, did much for otology by opening up a field for investigation without a knowledge of which therapeutics must necessarily be irrational and empirical. We are now well into the nineteenth century with our anatomical investigations of the ear, and find a host of workers eliminating the false and assimilating and classifying the accumulated facts of centuries, as well as adding others as the result of their own labors. Prominent among the anatomists of the nineteenth century who have apparently perfected our knowledge of the anatomy and physiology of the ear are, Shrapnell, Wharton Jones, Huschke, Breschet, Bock, Arnold, Jacobson, Muller, Toynbee, Politzer, Corti, and Hyrtl, the latter of whom called attention to the frequent porosity of the thin bony partition between the tympanic cavity and the brain, thus explaining how an otitis media may develop a meningitis. Pathological anatomy of the mastoid cells and its relation to diseases of the tympanum and brain are receiving quite a good deal of attention at this time. We have to regret that aural therapeutics never kept abreast with the progress of anatomical researches, and otological medicine, until within the last few decades, was in a great measure illogical and irrational. Fallopius taught that a discharge of pus from a child's ear was an effort of nature to remove obnoxious matter from the brain, and consequently should not be interfered with. This idea, false and irrational as it is, was studiously observed by some of his successors until comparatively recent times. Arcularius, a contemporary of Fallopius, had a rather unusual way of removing a foreign body from the ear. The head of a lizard is to be severed from its body and placed in the ear, and removed at the expiration of three hours, when the foreign body would be found in its mouth. One Capivacci, in the sixteenth century, devised a method of making a differential diagnosis between central and peripheric diseases of the ear by means of a vibrating iron rod held between the teeth. A modification of this test is found in the tuning-fork of to-day. Capivacci taught that deafness due to disease of the auditory nerve was incurable, which, for the most part, we find to be true at this time.

Sassonia, of the seventeenth century, is responsible for the deep-rooted delusion that complete deafness invariably follows a rupture of the membrana tympani. Thomas Willis, in the latter part of this century, attempted to refute this teaching by experiments on animals. Willis likewise made the first recorded observations of that condition of things in which certain persons hear better in a noise. This phenomenon, which is usually observed in persons suffering with an otitis media catarrhalis chronica, is called, after its describer, *paracusis Willisiana*. Among the instances cited by Willis is that of a wife who could not hear her husband except in a great noise. Consequently a servant was kept in the house whose duty it was to beat violently a drum during a conversation between the heads of the household.

We have now come to the latter part of the seventeenth century, and find that, although much of the false has been eliminated and otology for the most part is on a higher plane than it was in earlier and darker days, still many authors continue to teach of strange and unreasonable decoctions and ear-drops. Among the therapeutic resources of one practitioner of this time, the renal secretion of a female donkey, a male hare, and a wolf or white goat was mixed, warmed, and used in the ear.

Passing on to the eighteenth century, we find Valsalva's contributions to otological therapeutics second only to his anatomical investigations. He taught, among other things, that the hearing is merely impaired when the tympanic membrane is ruptured, and that a membrana tympani is in some cases restored after a solution of its continuity. He was the author of the Valsalvian method of forcing air through the Eustachian tube, and recommended it as a means of removing pus from the middle ear. He also proved that impaired hearing is often due to closure of the Eustachian tube. In 1724 a French layman, Guyot, washed out the mouth of the Eustachian tube by means of a complicated contrivance introduced through the mouth, and thus improved his blunted hearing. Encouraged by Guyot's experience, Cleland, an English surgeon, in 1741, devised a means for injecting fluid through the nose into the mouth of the Eustachian tube, and in a short while the Eustachian catheter formed an essential part of every otological surgeon's armamentarium. But this valuable therapeutic agent soon fell into unmerited disrepute owing to the fact that all deaf ears were catheterized indiscriminately, when in many instances an unfavorable prognosis should have been given at the beginning. Surgical interference in mastoid troubles was about this time brought prominently beofre the profession, mainly by the observations of Petit; but injudicious discrimination in the selection of cases for operation caused *trephining the mastoid* to become unpopular and remain so to within comparatvely recent times. In the early part of the nineteenth century, an English physician (Saunders) wisely advised paracentesis of the membrana tympani in acute suppurative inflammation of the middle ear rather than leave it "to a casual ulceration."

It was at this time that Sir Astley Cooper introduced the operation of perforating the tympanic membrane for deafness due to chronic non-suppurative inflammations of the middle ear.

Dr. Yearsley, of London, in a treatise published in 1863 traced the origin of most cases of impaired hearing to a pathological condition of the mucous membrane of the nasopharynx. Dr. Yearsley was really the first to use an artificial membrana tympani, which was afterwards improved upon by Toynbee. William Wilde's treatise on the ear (1853) did much towards placing aural surgery on a rational basis. Recognizing that most diseases of the ear are inflammatory in nature, he inaugurated a system of antiphlogistic treatment, which, with some modification, is practiced to-day.

Toynbee, by his physiological investigations having demonstrated that the mouth of the Eustachian tube is opened by the act of swallowing, and that the naso-pharyngeal opening is closed, it was left for Adam Politzer, of Vienna, in 1862, to immortalize himself by promulgating his method of inflating the middle ear with air. This apparently simple procedure has probably restored the hearing of more ears than the majority of all other means combined; indeed, in properly selected cases it rarely fails to give satisfactory results. Prominent among the authors of the present century, not mentioned above, who have contributed materially to our knowledge of otology, are, Burnett, Buck, Gruber, Pomeroy, Dench, and Roosa; and so thorough have been their investigations that this branch of medicine offers an inviting field for study, and bids fair soon to be on a plane with ophthalmology. Some idea of the magnitude of this study may be had from the statistical reports of the New York and Brooklyn hospitals, which show that nearly one thousand aural patients are examined annually in these institutions.

Authorities consulted: Encyclopedias, journals, and various treatises on the ear, particularly Roosa.

9 *East* 11*th St.*

"WHAT are you doing?" Dr. Holmes once asked a student in the dissecting-room. "Ligating arteries, sir." "Why not say tie?" rejoined the doctor. "I find that country practitioners ligate the arteries and that surgeons tie them." The best of this anecdote is that the unappreciative student spread it as a joke against Dr. Holmes.—*Ex.*

A CASE OF URINARY INFILTRATION OF SCROTUM, MISTAKEN FOR ORCHITIS. PERINEAL URETHROTOMY, CONSECUTIVE GANGRENE AND DEATH.

By THOMAS H. MANLEY, M.D.,
New York.

The following brief notes are submitted on a case which belongs to not an uncommon class; not that it presented any unusual or extraordinary features, but which sets forth the importance of the lesson which it conveys with respect to the necessity of accuracy in diagnosis in scrotal tumors or tumefactions; a subject but superficially considered in most text-books, and generally neglected even in many works specially devoted to genito-urinary surgery.

It might seem a simple matter to definitely recognize the pathological characters of scrotal enlargements by their symptomatology and a casual examination; but this is certainly an error, which all must concede who have had much experience in the surgical diseases of this region.

Maladies of a complicated character in the course of the spermatic-cord and in the scrotal pouch may involve, simultaneously or consecutively, so many different anatomical elements as to give rise to such a complexity of symptoms and so alter the relation of parts, that without a most painstaking examination, an error in diagnosis may be committed and, possibly in consequence, great misery entailed or even a life sacrificed.

It is only necessary to refer to some of the more ordinary lesions occupying those areas to understand how readily mistakes may be made.

For example, a bubo may be mistaken for a hernia, or *vice versa.* More than one capable surgeon has cut for hernia and had the chagrin, after laying down the law to a class of students, of exposing a lipoma, a cyst, or an abscess. There are many features of sarcoma, hygroma, and hydrocele, under various circumstances, so much alike, that none but a skilled expert can readily differentiate one from the other. Erysipelas, acute edema, and urinary infiltration of the scrotum present many features in common, which surely lead one into pitfalls, if he be unwary or unskilled.

It should be more generally known, that in many pathological states, and in neoplastic formations, a correct diagnosis, in this situation, may be impossible without a free exploratory incision into the tissues.

On the 11th of December, 1895, I was sent for to meet Dr. Deynard, of this city, in consultation, in the case of a man who had some form of scrotal disease.

I saw him at 2 P.M. He was forty-six years old; a driver by occupation, who had enjoyed good health and had never been ill in bed before within his recollection.

Five days previously he was seized with pain in the scrotum and sent for a physician. He was told, that he had inflammation in his testicles, and that they must be freely poulticed. Medicines to lull the pain were ordered, but the more he poulticed the greater was his distress; when in despair on the fifth day, the first doctor was discharged and a second called in.

Dr. Deynard at once recognized that his condition was serious, and insisted on a consultation with a surgeon.

When seen by me his condition was indeed desperate. He had the sunken, pinched features of one in the collapsing stage of fever. He had been having repeated chills, no sleep and constant thirst. The tongue was deeply furred, and there was the hay-like odor of septicemia distinctly evident; the pulse was 122 per minute, and temperature 103⅘. On oral examination I gathered that he had an old untreated stricture of the urethra, with difficulty in urination until the present trouble; when with each effort to void urine his agony was most intense and the swelling greater in the scrotum.

There was no history of syphilis, gonorrhea, or trauma, and hence, before the bedclothes were raised, my mind was made up, that there must have been a urethral stenosis with free discharge of urine into the peno-scrotal tissues and systemic poisoning from the resorption of the infected urinary elements. On exposure of the scrotum it was found to be swollen to the volume of an infant's head. It quite buried up the penis, had a boggy feel; and here and there, forward, near the peno-scrotal junction, anteriorly, there were scattered brownish, gray patches, suggestive of peripheral death or incipient gangrene. So great was the swelling that neither of the testes could be felt at all.

This was a grewsome case to take in hand. Neglect and ignorance had done their deadly work; but he had been a man of good physique who had never abused himself; besides, there were five helpless children dependent on his labors. The advice of Civiale to the surgeon, when in the presence of urinary-extravasation, whether pathological or traumatic, behind the triangular-ligament within the pelvis, or anterior in the perineo-scrotal region, was to operate "*sur le champ*"; but that time was past and now little could be done, except to perform a perineal urethrotomy through the structure and divert the urine outward. That operation I readily performed under cocaine-analgesia, with great relief following. But the following day nearly his whole scrotum fell away by phagedenic gangrene. The bare testes hung by the nude cords, only a small strip of the integuments remaining. Four days later a vast metastatic abscess developed in the left parotid-gland. The pus was deep-seated, requiring a very large incision to evacuate it. No improvement followed, and forty-eight hours later he sunk into coma and died.

Such was the melancholy ending of a life that should have been saved. How many more lives are thus annually lost through mistaken diagnosis, the records of which never see light in our medical chronicles?

But by mistakes we are later brought to avoid error, and if medical practitioners had only a little more moral courage and less zeal for self-laudation, and would let a little light in on the dark corners, as a sort of beacon to guide, particularly those about to set out on their voyage, how many would be warned of the breakers ahead, and what blessings they would bestow on poor suffering humanity? This case was the third which had come under my notice since April, 1895, of urethral trouble, resulting in impending or actual primary infiltration. The other two were traumatic; one was in hospital. This man, while intoxicated, had been kicked. The membranous section of the urethra had been suddenly driven up against the sharp edge of the descending ramus of the pubes and cut almost as neatly through as with a knife.

In this case, within twenty-four hours after the accident Wile's operation was performed by me, the urethra was immediately restored, and thus all danger of urinary infiltration was averted.

The other case was in an English mechanic who, while at work as a machinist, fell about five feet astride a narrow shaft striking heavily on the crotch. He continued work till evening, when trouble in urinating began. Medical aid was summoned, but it was insisted that his trouble was not traumatic but specific. The following morning he was brought to my office. At this time he showed signs of severe constitutional disturbance. Some blood was flowing from the meatus, and urination gave him great distress. Along the perineal raphe there was great distention of the spongy bodies of the urethra, with some discoloration of the overlying integument. After cleansing and cocainization of the urethra, a warm, well lubricated bougie was passed on to the bladder. After vesical irrigation, the catheter was left in until the second day. After its removal, it was evident that the linear or circular rent through the urethral mucous membrane had closed as there was no further trouble.

It is my intention, in the near future, to give in detail the history of these and several others, which have come under my care, of this interesting class, treated by various measures.

AT last the legislature of Ohio has passed a medical law establishing a State Board of Registration and Examination. The law is probably as good as could be gotten at this time, but the fact that the possession of a "diploma from a legally chartered medical institution in good standing" will constitute the right to practice under this law, and that the chief function of this board will consist in inspecting diplomas, will render the law less effective than our Ohio brethren would doubtless like. But even this much is a step in the right direction which we hope will be improved upon in time.

A PECULIAR FORM OF IRITIS CHARACTERIZED BY A GELATINOUS MASS IN ANTERIOR CHAMBER, AT TIMES RESEMBLING A CATARACTOUS LENS.

By S. LATIMER PHILLIPS, M.D.,
SAVANNAH, GA.

In 1871 Dr. Schmidt called attention for the first time to a form of iritis accompanied by an exudation into the anterior chamber and especially to that which resembled a dislocated cataractous lens, having been forced into the chamber.[*]

Gunning soon followed with three cases of free gray exudation into anterior chamber, calling it gelatinous, and saying that it was poured out suddenly and rapidly disappeared. After a few days no trace was left. Two of the cases were certainly caused by syphilis, while in the third it could not at least be excluded.[†]

Dr. E. Gruening, of New York, reported a case under the title of "Spongy Exudation in the Anterior Chamber."[‡]

He had seen this exudation before in the anterior chamber after operations upon the iris. He says Knapp characterizes this exudation as spongy. About twenty-four hours after an operation a brownish, shapeless mass is noticed, composed of filaments running in various directions and forming a network, resembling the gross structural arrangements of a sponge. The spongy exudation either disappears in this form or is transformed into a bluish-white homogeneous and sharply defined mass before doing so. Gunning's case was one in which the exudation came on from a gummy iritis, the sequel of syphilis contracted two years before. It was poured out rapidly into the anterior chamber, and on the fifth day had completly disappeared.

C. J. Kipp[||] reports a case in which the iritis appeared four months after the inoculation of syphilis, and the eruption was still on forehead, with mucous patches in mouth. He noticed a slight point of elevation in the iris near its pupillary margin. The next day it was covered by a grayish exudation, and on the fourth day the anterior chamber was almost completely filled with a semi-transparent grayish mass. Sixteen days after the first appearance of the tumor all the exudation had disppeared, the point of the condyloma only being indicated by a yellowish discoloration of the iris and a posterior synechia.

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[*] Eigen Thümlich geformte Exsudate bei Iritis. Klin. Monats. für Augenheilk, s. 94.

[†] Klin. Monats. für Augenheilk, B'd x., s. 7.

[‡] Arch. of Ophthal. and Otology, vol. iii.

[||] Arch. of Ophthal. and Otology, vol. iii., No 1.

Alexander* saw altogether six of these cases in his practice, and in every one of them syphilis was undoubtedly the cause. The first of these cases he saw in 1867, in a syphilitic patient with repeatedly recurring plastic iritis. In the anterior chamber, at the margin of the lower border of the pupil, with clearly defined outlines, was a gray opaque exudation; with every motion of the head there was a tremulous movement inward. After eight days it had entirely disappeared. Of the remaining cases, two had exudation resembling dislocated lenses. The lower half of the anterior chamber was filled with the mass, only the border of the iris showing All of these cases had the usual treatment for syphilis, and complete absorption took place. Alexander thinks, though it may be possible from other causes, such as trauma, that syphilis is the chief one.

C. J. Kipp† has seen cases of gonorrhœic irido-choroiditis in which there was exudation in the anterior chamber, upon coagulation, resembling an opaque lens, suspended in front of the pupil. This was always absorbed, and in most of the cases the vision was completely restored. A few though showed impaired vision from membranes, etc.

Dr. Ernest Fuchs,‡ in speaking of this form of exudation, says it is found in every kind of acute iritis occasionally. It rapidly skrinks, in a few days being entirely gone, or leaving only a thin membrane, and sometimes a small thread attached to the edge of the pupil.

The histology, as given by Adolph Alt,|| is that there are numerous large and small hemorrhages into the parenchyma of the iris. The fluid portions of the blood are transuded into the anterior

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*Syph. und Auge, s. 70.

†New York Record, vol. 38, No. 2, p. 40.

‡Lehrbuch der Augenhielkunde, 1889, s. 302.

||Lectures on the Human Eye, 1884, p. 86.

chamber, while its cellular elements remain in the iris tissue and undergo fatty degeneration. The fibrin of the blood coagulates in the anterior chamber, but is later on dissolved. Sometimes two kinds of exudation are found in the anterior chamber, a gelatinous and a sero-fibrinous. The latter, under a microscope, is found to be a network of fine fibrinous threads, like those found in the alveoli of croupous pneumonia, and is filled with serum and a small number of lymph cells. The former is a uniform transparent substance, differing from the aqueous humour only in being gelatinous. The absorption of this exudation always begins nearest the cornea and progresses toward the center. Alt designates this as a variety of serous iritis.

Having met with two cases in my practice which would answer to the clinical description above, I report them:

I. Henry W., a large, well-formed negro man, of thirty-three years, presented himself for treatment with the following history: Has had repeated attacks of inflammation of eyes (recurrent iritis) and sight slowly getting worse until now, when he can scarcely see at all. R. counts fingers at two feet; L. only has light appreciation. His attacks were always accompanied by severe pains in head and eyes. At the time has but little in right. Slight peri-corneal injection. Pupil of left eye closed by membrane, sequel of old iritis. No irritation about this eye now. R. eye, find lower half of anterior chamber filled with a dull, grayish opaque mass. Under atropia pupil dilates upward, leaving a small free opening. The mass seems to have its origin at the lower and outer margin of the pupillary border, and pushing out seems suspended before the pupil. The iris which shows above is of a dingy, muddy color, and seems somewhat pressed forward where the exudation has its origin. I could get no clear history of syphilis in this case, though he confessed to having had buboes eighteen years before. Notwithstanding, he was put on gr. ½ bichloride t. i. d., to be increased. The eye was treated with atropia, and closed by a compress and bandage. He was under my treatment for three weeks; at the end of that he disappeared, and I have not seen him since. When I last saw him the exudation had much diminished in size, and vision was some better.

II. Brown Weathers, colored, aged nineteen. Two months since contracted syphilis in the usual way. Now has scaly eruptions over both upper and lower limbs, with enlarged inguinal glands and mucous patch in mouth. Lips thick and hanging, with discharge from nose, tendency to skin ulceration at alæ. Altogether in a badly nourished state. R. eye v. $= \frac{20}{xx}$. L. v. $= \frac{20}{cc}$. Was taken with severe pain in left eye two days ago, it being always more severe at night. Eye red and photophobic; in fact has all symptoms of iritis. Pupil responds to light but sluggishly. In anterior chamber is a light, pearl gray mass, partially filling it. Apparently it has sprung out from the inner pupillary margin of the iris, and extends in toward the periphery. It juts out some into the pupil, but does not extend clear across. The outlines of the mass are clearly defined, and at the point in the iris where the exudation seems to have its origin, the iris does not respond to atropia, indicating a growth there, or some plastic exudation binding the iris to the anterior capsule of lens. The mass projects out into the anterior chamber, and at its most prominent point almost comes in contact with Descemet's membrane. There is no movement of the mass synchronous with that of the head. Tension normal. Atropia locally, with compress and bandage. He was put upon gr. $\frac{1}{16}$ hyd. bichlor. t. i. d., with gr. x of pot. iodid. t. i. d.

Three days later the gray body diminishing rapidly. Four days after this very much shrunken, and looks like a thin membrane of slightly brownish hue now. Long axis has become vertical. A few small spots are seen on capsule now, where it has come in view; pupil well dilated.

Ten days later, nine days after I saw case, all appearance of the mass gone, save a yellowish brown point size of a pin head, in the iris near its pupillary margin; vision nearly normal. No redness about eye. I did not see patient again after this.

Here we have two cases of iritis, one positively due to syphilis, the other most probably, with a peculiar, outpouring grayish matter into the anterior chamber. What is this, and where does it come from?

There are two distinct forms of syphilitic iritis—the plastic or papular, occurring at the same time with secondary manifestations of the disease, as eruptions over skin, mucous patches, etc. Here, no doubt, the same thing takes place as does in the skin, papular eruption, but being modified by the anatomical structure of the iris. It is from these papules that the exudation springs, and, as in other cases of plastic iritis the exudation is absorbed. Serous iritis never occurs in syphilitics as a manifestation of the disease. The other form being gummy, takes place in the late stages of syphilis. The gummy tumor varies from the size of a pea to that of half a hazelnut, and generally has its location in the region of the ciliary border of the iris. It is not absorbed, but undergoes fatty degeneration, leaving a scar in the iris tissues.

THE SURGICAL TREATMENT OF RETRO-DEVIATIONS OF THE UTERUS.*

BY AUGUSTIN H. GOELET, M.D.,
NEW YORK.

The author declared that displacements of the uterus are not accorded the consideration they deserve, and that the routine plan of inserting a pessary and dismissing the case from further attention is an error too often committed. He thinks the majority of cases, especially those of long standing, where structural changes have taken place in the walls of the organ, require surgical intervention for their cure. The pessary alone is never sufficient, except, perhaps, in very recent cases. The concomitant metritis and endometritis must be overcome before a radical cure can be effected.

After discussing the merits of Alexander's operation and the intraperitoneal methods of shortening the round ligaments and vaginal fixations, he described an operation for retroflexion which he had employed with success for the past twelve years.

The Alexander operation, which is only applicable in movable retro-deviations, he thinks unnecessary. Its chief disadvantage is the time it requires and the prolonged convalescence it entails.

Intraperitoneal shortening of the round ligaments requires more time for its execution, and the convalescence is longer than suspensio-uteri, and the results have not been so good.

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*Abstract of paper read before New York State Medical Society, January 28, 1896.

Vaginal fixation is objectionable because it substitutes a fixed anteflexion for a movable posterior displacement. The recent unfavorable reports of complications during labor following it, offer another very serious objection to this operation. The best evidence of its inefficiency is that its originator, Mackinrodt, has abandoned it.

Where the uterus is fixed by firm adhesions, the author advocates opening the abdomen by means of a small incision, breaking them up and suspending the uterus by its posterior face from the anterior abdominal wall. This does not fix the organ as when ventro-fixation is done. In time the uterus recedes from the abdominal wall, close to which it is at first suspended, and swings in an easy position of nearly normal anteflexion. This he prefers to ventro-fixation, because the uterus occupies a nearly normal position and is fairly movable. Its execution consumes less time than intraperitoneal shortening of the round ligaments. The results have been very gratifying.

When the adhesions are not very firm or extensive, they are broken up by manipulations under anesthesia without opening the peritoneal cavity, and the case is then treated in the same manner as when the organ is movable.

The method of procedure which he advocates in place of Alexander's operation in movable retro-deviations, has this to recommend it, viz: that it aims at a cure of the coexisting metritis and endometritis, the maintaining cause of the displacement, and requires but a week's confinement in bed.

For retroversion he dilates the canal, curettes and packs the cavity with iodoform gauze. The vagina is then tamponed with the same gauze in such manner as to throw the uterus into a position of anteversion. This dressing is removed every day, the cavity is washed out with a one per cent. solution of lysol, and it is reapplied. This is done for a week, during which time the patient is confined to bed. Then a vaginal pessary is fixed to hold the uterus in a correct position. The cavity is irrigated twice a week until a healthy endometrium is reproduced.

For retroflexion the same procedure is adopted, but instead of packing the uterus with gauze, a straight glass drainage stem is used, which serves the purpose of a splint and keeps the uterus straight. It is then maintained in a position of anteversion by means of vaginal tampons of iodoform gauze. The gauze tampon and stem are removed every day, the cavity is irrigated to remove retained clots and débris, and after cleansing the stem it is reinserted. At the end of a week the stem is removed, a vaginal pessary is inserted, and the patient is permitted to get up.

The success which he has obtained with this method leads him to believe that the other more complicated and hazardous operations designed for movable retro-deviations are unnecessary.

REPORT OF A CASE OF ADDISON'S DISEASE.

BY J. N. HALL, DENVER, COLORADO,
Professor of Therapeutics and Clinical Medicine, University of Colorado.

Although no autopsy could be obtained in the following case, I believe it was sufficiently typical to make it worthy of record:

J. D., female, sixteen years of age, was born in Iowa, of healthy parents, and had no family history of interest in this connection. As a baby she had a severe attack of bronchitis, and, at the age of five years, one of acute lobar pneumonia. Had also the usual children's diseases, but was pretty well generally, with these exceptions, until fourteen years of age. At that time it was noted that she was getting darker in color than normal, but it was attributed to sunburn. Her general health was not greatly affected until six months later, when the discoloration became marked. She lost some weight at this time, falling from eighty-three pounds to about seventy-three pounds. First menstruation fifteen months ago, second one year ago. Since that time has flowed nearly every month, and of late has a pale flow nearly all the time, more leucorrheal than menstrual in character.

She has had distress after meals since the beginning of the discoloration, and of late has been constipated. Appetite good, excepting during the past summer. The mother thinks the child passes an increased amount of water, and that she drinks more than normal, but she does not arise in the night for micturition. Of late she has had morning sickness.

Since September last, a period of six months, she has had marked dyspnea and palpitation upon exertion. The dyspnea is at times noticed when quiet in bed. Although she had a dry, hacking cough in the beginning, she has had none of late excepting when suffering from a cold. She formerly complained a few times of pain through the region of the heart, and once or twice in the pelvis during menstruation, but aside from these manifestations she has been free from pain. There has been no edema. She has been excessively nervous, especially at her menstrual periods. Her face has at times twitched during the night. Her knees have been sore at the menstrual epoch at times, and a fine eruption has appeared, not itching, but tender. This appeared over the hips during one menstruation. During the past summer she suffered from several attacks of hives, as she has commonly done for years.

Examination showed a slender girl, weighing but sixty-eight pounds, excessively nervous, emaciated, breasts but slightly developed. Over the face were scattered about fifty black spots, none more than one or two lines in diameter, not papular. The mother states that some of them have become smaller and perhaps may have disappeared, but of this point I do not feel at all certain. They first appeared about fourteen months ago. They are stated by Niemeyer to be characteristic of the disease.

The skin of the whole body is much darkened, and the color approaches a mahogany shade over the joints, especially those of the spine, the knees, elbows, and the right shoulder. Dr. H. B. Whitney examined her with me, and we found the lungs, kidneys, spleen, liver, pupils, and external genitals negative. No lumbar tenderness. The pulse was 120 per minute, and the heart's action very feeble. The patient was somewhat anemic and complained, even during the examination, of excessive languor.

Presenting then the typical symptoms mentioned by Addison, anemia, debility, feeble heart, irritable stomach and pigmentation, the diagnosis seemed established, as none of the other causes of similar symptoms could be found. A grave prognosis was given and a tonic treatment prescribed. She failed gradually and died in four months, the course being about two years and four months from the first symptoms.

NOTE ON THE HISTORY OF SYPHILIS.

By E. VAN GOIDTSNOVEN, M.D.,
ATLANTA, GA.

Syphilis is composed of two words—*sys*, a sow, and *phileo*, I love. This appellation was coined by Fracastor, a celebrated physician of Verona. He wrote a Latin poem on this terrible disease in the year 1530. Previous to that time syphilis, in common with many other diseases, had no scientific name, but was designated in various countries according to their respective languages and dialects expressive of the disease, the effects it produced, and the terror it inspired. In France it was called *paillardise.*

Some writers, amongst them Bell and Cazenave, contend it raged severely amongst the ancients. Some describe it as a form and degeneration of leprosy, whilst others—and these constitute the great majority—assert that it is of modern origin, for according to their statement, its first appearance in Europe occurred in 1494. Those who have adopted the latter opinion point out Naples as the cradle of syphilis during the French occupation of that city. Oviedo and his disciples assert that this disease was imported from the New World by the soldiery of Christopher Columbus. Astruc, a writer of considerable repute on venereal diseases, was a strong advocate of this theory. He also attempted to demonstrate with remarkable erudition that syphilis was entirely unknown to the physicians and historians who wrote before the fifteenth century, and that it was not and could not be a degenerative process from leprosy. This opinion was subsequently combated by Sanchez in a masterly manner. Cazenave, a high authority on syphilis, compiled a long series of documents from the Leviticus of Moses up to the authors of the fifteenth century, giving numberless descriptions which seem to characterize some of the accidents of syphilitic origin. Littré, in his *Gazette Medicale*, proves that syphilis existed in France in the thirteenth century and presented forms analogous to those we meet with to-day.

Police regulations have been found in the archives of London bearing the date of 1162, having for their object the prevention of syphilitic propagation. Similar regulations were found in Venice dated 1302. The most remarkable document for the prevention of syphilis was issued in 1347 in the city of Avignon by Joan Queen of Sicily and Countess of Provence. It reads as follows: The Queen orders that on every Saturday a matron and a barber appointed by the consuls visit all the debauched women of the bagnios, and if any one of these be found afflicted with the avenging disease of paillardise, the same shall be removed and assigned some special and private lodging, there to be unknown and inaccessible to any one, so that the youth be spared any evil."

This is a remarkable document. It disproves the Neapolitan origin of syphilis beyond all doubts. On the other hand, it obviously shows that medical science, lore, practice, and ethics were in a state verging on degradation no further back than the fourteenth century. Think of a royal decree appointing a barber and an ignorant woman, in the very heart of christendom, to diagnose a case of one of the vilest and most intricate diseases that has ever afflicted humanity!

No wonder we have such poor materials and meagre data to rely upon!

The existence of a disease antedates its recognition, even under the glare of modern science! *Vide* appendicitis!

YOUNG PHYSICIAN (wishing to feel his fair patient's pulse)—Will you give me your hand?

Fair patient (embarrassed)—Oh, but, doctor, you--you know—I am so unprepared! I must really ask papa first.

SOCIETY REPORTS.

CLINICAL SOCIETY OF MARYLAND.

BALTIMORE, February 7, 1896.

The meeting was called to order by the president, DR. J. M. HUNDLEY.

DR. J. WHITRIDGE WILLIAMS read a paper on the "Induction of Premature Labor for other than the Usual Indications," of which the following is an abstract:

The most usual indications for the induction of premature labor are either moderate degrees of pelvic contraction or progressive renal insufficiency. During the past year it has been my lot to meet with two cases which demanded the operation for other than the usual indications; the first being a case of acute dilatation of the heart following mitral insufficiency, and the second a case of acute pyelitis which directly threatened the life of the mother.

CASE 1. Mrs. M. V., aged thirty-four, married eight years, multipara. Up to three years ago personal and family history negative, but at that time she was confined to bed with acute rheumatism, the knees and ankles being the parts affected. Present pregnancy perfectly normal up to the latter part of November, 1894, when she began to suffer from dyspnea. On Christmas day she applied for aid at the Johns Hopkins Hospital, obstetrical department, and my assistant saw her. She was suffering from broken heart-compensation, and presented a somewhat dilated heart and a distinct mitral regurgitant murmur. She was placed upon digitalis, and later upon iodide of potash and Blaud's pills, and was comfortable up to January 10, 1895, when my assistant was again called and found her in a serious condition. I was at once sent for and found her sitting up in bed fairly fighting for air. She was intensely cyanotic, with a pulse from 150 to 160 per minute. The heart was markedly dilated, laboring intensely, and murmurs were heard at all the valves. Lungs edematous. Hypodermics of digitalis were given, as well as a considerable quantity of whisky, but in spite of this the dyspnea and pulmonary edema increased. I then tried the effects of blood-letting, removing about a pint from the veins of the right arm, this giving temporary relief. I followed it by a second venesection, at the conclusion of which she was able to lie down and sleep. During the following day her condition again became so serious that we determined to induce premature labor. Under the strictest antiseptic precautions a silk-covered bougie was passed into the uterus. During the next three days several other and larger bougies were introduced, and eventually she gave birth to a large child perfectly spontaneously. Immediately after delivery her condition improved, but the puerperium was not entirely normal. Her rise of temperature seemed to be due to a lighting up of the old endocarditis rather than to sepsis. The heart recovered its compensation, and she was able to leave the hospital on the twelfth day.

CASE 2. Mrs. S., aged thirty, primipara; family and personal history negative. I was first consulted when she was about four months pregnant, suffering with a great deal of pain in the lower part of the abdomen and obliged to pass small quantities of urine almost constantly. From the history I suspected a retroflexed pregnant uterus, but upon examination found that organ in its normal position. The urine was examined, had a specific gravity of 1016, acid reaction, and under the microscope showed large numbers of leucocytes. Diagnosis of acute cystitis was made, the patient placed under treatment, and in two weeks pus had disappeared from the urine. All went well with her until the latter part of August, when she was suddenly seized with intense pains in the left renal region, accompanied by chills and fever. She was then in Chicago, and recovered sufficiently under medical treatment to return to her family in Virginia. For several weeks she did very well, but was again seized with a similar attack which did not promptly yield to treatment, and she was brought to Baltimore. She recovered from this attack, which was in September, but had a recurrence in October, when her condition was more serious. She emaciated rapidly, was constantly nauseated, and the urine was loaded with leucocytes and both granular and hyaline casts. After consultation it was deemed best to empty the uterus. Chloroform was given, but before she had become completely anesthetized her respiration ceased, and it was with the greatest difficulty that she could be resuscitated. Bougies were then introduced without anesthesia, but as the contractions were so feeble, I had to dilate the cervix manually and extract the child. This operation was done under ether. The child died thirty-six hours after birth, apparently from a heart lesion. The mother improved rapidly, and when last heard from was in excellent condition.

DISCUSSION.

DR. L. E. NEALE: It seems to me that the method of dilatation by bougies is rather slow for such cases, and if possible that the condition of the patient would permit, the result might have been brought about in an easier and more rapid way. In the case which I saw with Dr. Williams, that had to be resorted to eventually after thirty-six hours' delay with the bougie. I remember saying that it was best that woman should be delivered as soon as possible. I have had some small experience with the slowness of this instrument's working, and have at times been forced to abandon the bougie, and placing the patient under an anesthetic, to dilate and deliver. In the use of glycerine, which has been advised, I believe the best authorities are now strongly opposed to such a thing. My own results have not been satisfactory. For my part, if the case called urgently for delivery I would, as soon as her condition demanded it, not delay for bougies, but dilate and deliver as fast as possible. I think much valuable time may thus be saved.

Dr. Williams did not mention one little point which I have always considered of great importance—that is, the repeated introduction of the bougie in different directions and twisting it about between the membranes before letting it remain. I don't think the dangers of rupture are very serious. All such measures, though, are very slow and liable to fail, and there is no way of foretelling in which case they will succeed and in which fail. Where there is no cause for haste such measures would be applicable, but where such cause does exist more rapid measures should be employed.

DR. C. H. JONES: I arrived too late to hear Dr. Williams's paper, I am sorry to say, for I have a case to report and upon which I would like the opinion of the members. It is that of a young woman twenty-four years of age, married, and pregnant for the first time. She has a marked double aortic murmur without any history of rheumatism, scarlet fever, or any of the diseases that would produce the heart trouble. She is in good health, and did not know she had a heart until a life insurance agent examined her and told her she might drop dead at any minute. What I want to know is this: Whether it is advisable to wait for term, or to perform an abortion, or induce premature labor in the case. She is now pregnant nearly five months.

DR. J. W. WILLIAMS: I would say in regard to this case, that I think any interference would be unjustifiable. The less you do for her the better, unless she develops some other symptoms. I have seen several cases of marked heart lesions go through labor without any trouble, and the heart cases, too, bear an anesthetic very well. There is no need to induce labor unless some emergency arises. In my first case we induced premature labor in order to take the strain off the heart. I should advise you to wait till the end of the pregnancy.

DR. L. E. NEALE: I can report a case which occurred one month ago, where the patient had both aortic and mitral lesions when she came in the hospital. Nothing was done for her, and she had a perfectly normal labor. I can recall a case, on the other hand, where there was no valvular murmur heard, but there was a very slow pulse, and which proved fatal. It was a criminal abortion, and she was taken sick on the train. She had several fainting spells. Labor was perfectly normal, but immediately afterwards she went into collapse state and died. No post mortem was made, so I can say nothing about the condition of the heart, but I suspect there was trouble with the muscular structure rather than with the valves. In Dr. Jones's case I should do nothing.

DR. W. H. WELCH: I am not an obstetrician, but I have recently looked up the literature on the subject of heart trouble, and I noticed there the statement that patients pass through pregnancy and labor without any interference with the action of the heart in these cases. It is not clear why compensation should be broken in pregnancy. As regards the relative prognosis in aortic or mitral disease, I think there is no question that the patient is more comfortable with aortic than with mitral trouble. A patient with aortic insufficiency may live out a long life of hard work, and the question has been raised whether they should be refused life insurance. When compensation is broken, however, they run a more rapid and fatal course than those of mitral insufficiency.

DR. J. FRANK CROUCH: Speaking of broken compensation, I would like to report a case that came under my notice. The patient was a young woman of twenty-four, pregnant for the first time. She was under the charge of one of my friends, and during his absence from the city I was called to see her. I found a well marked mitral regurgitation and considerable edema. Placed her upon digitalis, and she went to the end of pregnancy without any disturbance of the heart at all. She went through a normal first stage of labor, but when the head came into the pelvis she sudddenly became cyanotic and presented some alarming symptoms. I was sent for to assist. Pulse was 125, and she was in a grave condition. The question of anesthetics was raised, and we decided to give it. Chloroform was used, and the heart seemed to grow stronger. The child was delivered by traction. Compensation was established and inside of twenty-four hours she was comfortable, but four months later she dropped dead. I have seen other cases of broken compensation occurring during labor. Fifteen months ago I was called to see a woman who was gasping for breath when I reached her bedside. She rallied under digitalis and went on comfortably for two weeks, when she had another attack of dilatation. Labor was induced. She was delivered, and since that time has had no trouble. I take it that in cases of well compensated valvular trouble it is unwise to interfere until compensation is broken.

DR. RANDOLPH recited a case of recovery from "Sympathetic Ophthalmia," with exhibition of patient.

By way of preface, I should say that there was no objective features about this case which would strike the general practitioner, but inasmuch as recoveries from this disease are exceedingly rare, and as this is the first case of the kind which has been brought before the society, I thought it would be interesting simply to see one who has had such an experience. You all know that sympathetic ophthalmia is traceable to a penetrating wound of the eyeball, that is to say, an eye is injured, irido-cyclitis follows, and in a certain length of time, ordinarily from three to ten weeks, inflammation breaks out in the other eye, and this inflammation is called sympathetic ophthalmia. Sympathetic ophthalmia may be defined then as a plastic inflammation of the iris, ciliary body, and choroid of one eye, having its origin in a traumatic inflammation of the same parts in the other eye. Injuries of this character as a rule destroy sight at once, or certainly in a very few days after the injury. Eyes then which have been rendered sightless by penetrating wounds are regarded as dangerous eyes and liable to give rise to sympathetic trouble, and constantly they are removed. Such a course requires little deliberation on the part of the surgeon, but there is another class of cases seldom seen where vision is preserved in the injured eye after the outbreak of the sympathetic inflammation, and the case which I exhibit here to-night belongs to this variety. Such a case calls for no little deliberation in its treatment. This man came to the dispensary of the Johns Hopkins Hospital early last May. I found a penetrating wound of the upper and inner border of the corneo-scleral region, and at the bottom of the anterior chamber there was a faint line of what appeared to be pus. The vision was reduced to the ability to count fingers at six feet. He was given the usual treatment in such cases—one per cent. solution of atropine to be used every three hours, and a compress bandage. He got worse, however, and returned in three days with the anterior chamber nearly full of pus and only slight perception left. I performed paracentesis of the anterior chamber, and fortunately there was no reformation of the pus. The condition went on to get better, and in the fifth week after the accident he could count fingers at fifteen feet. He disappeared from the clinic, and came back in four days with the complaint that he could scarcely see anything out of the right eye. An examination revealed a typical case of sympathetic uveitis. The media was so cloudy at this time that it was impossible to get a satisfactory view of the fundus. The vision of this eye was $\frac{16}{200}$, while that of the injured eye, the eye which had caused all the trouble, was still the ability to count fingers at fifteen feet. If the left eye had been blind I would have removed it, but the fact that good vision was still present in it and the possibility of its becoming ultimately the better eye, contra-indicated any radical measure. There is a case on record where a man in just such a plight as this one lost the sympathetically affected eye, and the exciting or injured eye became the useful eye. There was no change in my patient until the end of the ninth week, when the injured eye became suddenly very soft and in the course of a few days light perception disappeared. There was then no longer any necessity of keeping this eye, and thinking that as the focus of the trouble it might still be sending pernicious impulses to the other eye, it was removed. Not long after this the sight in the other eye begun to improve, and now, nine months after the development of the sympathetic affection, he has $\frac{16}{40}$ vision, and can read some of the letters on the next lower line. The prognosis in these cases must be given with a certain amount of reserve, for lapses are common. As a rule, however, a patient who goes a year without relapse presents conditions which justify a favorable prognosis. In the past twenty years there have been reported about eighteen cases of recovery from sympathetic ophthalmia. This case is interesting then, not only because it is one of recovery from sympathetic ophthalmia, but because vision was preserved in the injured eye a considerable length of time after the outbreak of the sympathetic affection.

DISCUSSION.

Dr. E. J. Bernstein: I was called recently by Dr. Hall to see a colored man who had received an injury to his eye in June last. He had gone from bad to worse until he had only light perception, and in the other eye had symptoms of sympathetic ophthalmia—I mean signs of papillitis—present. I removed the offending eye and his vision in the other improved. It was done only three weeks ago, though.

Dr. W. H. Welch: What were the anatomical lesions in this case? I believe ophthalmologists make a distinction between sympathetic irritation without anatomical lesions and sympathetic inflammation of the eye with changes in its structure. To what extent, then, were the symptoms in this case due to irritation and what to inflammation, and how far had the lesions retrogressed?

DR. RANDOLPH: Cases such as the one reported by Dr. Bernstein have been observed by Noyes, Milles, Frost, and others, but they should not be regarded as examples of true sympathetic ophthalmia. As I have remarked, true sympathetic ophthalmia is a plastic uveitis; in other words, an inflammation of the iris, choroid, and ciliary body, an inflammation accompanied with the usual symptoms of a plastic irido-cyclitis, with which you are familiar. Dr. Bernstein's case should be called sympathetic papillitis, which, like sympathetic irritation, is a benign form of sympathetic ophthalmia. In both these varieties of the disease the sympathetic manifestation, as a rule, disappears entirely with the enucleation of the injured eye, while in true sympathetic ophthalmia, such as the one I have reported, the removal of the injured eye is followed by no improvement of the sympathetic eye. The improvement which was commenced in my case soon after the enucleation of the injured eye was probably a coincidence. In Dr. Bernstein's case the patient will recover normal vision, while in my case such a termination is impossible. In answer to Dr. Welch's question I may say that the anatomical lesions in the sympathetically affected eye consisted in two posterior synechiæ at the lower and outer edge of the pupil and opacities in the vitreous body, and now that the media are clear enough to permit a view of the eye-ground, there may be seen widespread changes in the choroid, consisting in pigment deposits, chiefly in the region of the papilla, and numerous whitish areas of degeneration.

H. O. REIK, M.D., Secretary.

525 *North Howard Street.*

THE Twelfth International Medical Congress will be held in Moscow August 19th, continuing six days. The official announcement states that "papers may be read and discussed in the meetings in French, German, or Russian." The omission of English is an egregious and inexcusable blunder, which will result in a virtual exclusion of English-speaking physicians from the congress.

CORRESPONDENCE.

THE FITZGERALD COLONY.*

FITZGERALD, GA., February 10, 1896.

Editor of Northwestern Lancet:

SIR:—I am here at the "Old Soldiers' Colony." Have some land which I began plowing to-day to prepare for fruit trees. There are some six or ten thousand Northern people here, having principally come since November, 1895, all busy, happy, healthy. The colony has its 12,000 families, and will take no more members. Minnesota has about four or five hundred here, with several times as many to follow. Minneapolis people are frequently met. The weather is delightful, like late springtime in Minnesota. Air pure and clear, water the finest on earth. No malaria shows yet, and the old Georgian's word and appearance for it, "there is none here." Half the people here came by teams and their long rides from the Dakotas, Kansas, Texas, Ohio, Indiana, Illinois, Iowa, New York, Michigan, and, in fact, from every State in the Union, including many from Idaho and California, have been wearisome.

Very many are here mainly from poor health, and a large percentage of the asthmatics and rheumatoids are greatly improved, and the relief found here from indigestion is most wonderful. This will prove a very poor market for pepsins.

Will the *Lancet* please do me and the Old Soldiers' Colony the justice and great favor to correct, over my signature, a libelous and infamously false statement printed in some of the Minneapolis papers to the effect that "the old soldiers are dying off down there like cattle with the murrain." Although a large proportion of the male adult population are old soldiers, and among them a counterpart of every old cripple and walking invalid pensioner you ever

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*The above letter we reproduce, with the permission of the writer, Dr. Coe, from the *Northwestern Lancet*, of St. Paul. It is a full refutation of some of the reports in circulation about the colony. Dr. Coe writes us that "this article was true when I wrote it, and it is true now."

knew, there has not but one old soldier died here from any cause. Of the five deaths which have taken place in the colony two have been from accidental causes, one from marasmus (a bottle-fed infant), and two from lung disease, one an advanced consumptive whose friends hardly expected to reach here with him alive, and another from hemorrhage of the lung, no doubt caused by a hurt in overlifting in the quarry.

As a sanitary officer of the colony and surgeon in charge of the Colony Hospital, I speak from positive information. The only disease at all common is a continued fever, similar to, though much milder, than our northern typhoid, not inclined to diarrhea or delirium, yet when established generally continues two to four weeks, and if seen in its formative period may quite generally be shortened and frequently averted by the abortive treatment of Woodbridge, of Youngstown, Ohio. These fevers have as their most threatening symptoms the various hemorrhages incident to typhoid. So far as my pesonal observation extends the disease is principally confined to young adults and children, and I do not remember a case following a previous run of typhoid.

The standard of practice is well up in Georgia, and the etiquette of the medical profession is well abreast that of the highest standard, and seems parallel with the polite and chivalric manners justly accorded to our Southern brethren.

S. B. COE, M.D.

GANGRENE RESULTING FROM BITE OF "BLUE-GUM" NEGRO.

GALLION, LA., March 2, 1896.

Atlanta Medical and Surgical Journal:

With your permission I will report what is to my mind rather a peculiar case. A stout negro man, about thirty-five years old, came to my office with his left hand very much swollen, and upon careful examination I found the entire hand in a gangrenous condition. My first impulse was to amputate at the wrist, but after a moment's thought I concluded that I had better get the history of the case before operating, and upon inquiring I elicited the following history:

About ten days previous while in a fight with another negro the latter had gotten his fingers in his mouth, between the first and second joints, and bit it to the bone; not thinking that it would amount to anything, he had his wife to dress it with antiseptic, and for two or three days thought it was getting all right. About the fourth day it began to pain him very much, and he had his wife to redress it with an ointment of some kind, but it continued to grow worse, and becoming alarmed he applied to me; and as previously stated, I found the hand in a state of decomposition. But as the primary trouble had originated in the first finger I decided to practice conservative surgery and give him a chance for his hand. Therefore I proceeded with patient under the influence of chloroform to amputate the finger at the metacarpo-phalangeal articulation, and with my finger and handle of scalpel, I removed all unsound flesh from the entire hand, closed the wound with interrupted silk sutures, and dressed with iodoform gauze and absorbent cotton, and instructed patient to return on third day, which he did, and to my very great surprise I found nice, healthy granulations, and in due course of time he made a good recovery with the loss of one finger only.

Rather an unpleasant sequel is yet to come. Just before administering chloroform, I gave patient hypodermically $\frac{1}{4}$ gr. morphine sulph. with $\frac{1}{150}$ gr. atropine sulph. After getting through dressing the hand I waited the usual time for patient to revive, of course anticipating no trouble from that source, but as he did not respond as readily as I thought he should, I began bathing his face with cold water and he continued to sleep. After waiting a while longer, I again examined him and to my astonishment I found his pulse down to thirty and his respiration about five per minute. I at once gave him digitalin hypodermically, and whisky by the mouth, and after several hours he recovered.

Why should such a slight wound result so seriously? And what caused scuh profound coma after the administration of the anesthetic? Was it caused from the morphia or from the chloroform?

The anesthetizer was composed of a piece of heavy paper rolled into a cone shape and cotton put in bottom to hold the chloroform. The operation was performed in an open office with free circulation of air.

The patient said his antagonist had blue gums, and that was the reason why it made a poisoned wound. In his own vernacular "A blue gum nigger's bite is badder den a mad dog's; dey will sho pisen you every time." Yours truly,

L. H. OGBOURN, M.D.

CASE OF EARLY PREGNANCY.

LOCUST GROVE, GA., February 3, 1896.

Atlanta Medical and Surgical Journal:

I have had filed in my office for more than twenty years the following case which I now wish to report: Fanny Allen, colored, born July 17, 1860. Was first confined (girl) January 11, 1872. Again confined (twin boys) July 18, 1873. The woman, or rather girl, thus became a mother at the early age of eleven years, five months, and twenty-three days, and gave birth to twins at the age of thirteen years, one month, and fifteen days.

I would further state the children were of good size, lived and grew off well, and that the mother's pains or suffering in labor appeared to be less than common. The mother was born and raised in Spalding county. T. J. MITCHELL, M.D.

A RECENT legal decision declares that a consulting physician called in by the attending physician, for the purpose of consultation as to the treatment of the case, may recover his fees from the patient.—*Food.*

"I HAVE more than I can attend to," said the young doctor to the old practitioner. "I had to get up five times last night." "Why don't you get some insect powder?" was the only reply.

EDITORIAL.

The office of the Business Manager of THE JOURNAL is Nos. 311 and 312 Fitten Building.

The editors are not responsible for views expressed by contributors.

Articles for publication should reach this office not later than the 15th inst.

Address all communications, and make all remittances payable to THE ATLANTA MEDICAL AND SURGICAL JOURNAL, Atlanta, Ga.

Reprints of articles will be furnished, when desired, at a nominal cost. Requests for the same should always be made *on the manuscript*.

THE AMERICAN MEDICAL ASSOCIATION.

It is well known that this, the largest Association of American physicians and surgeons, will hold its annual meeting in Atlanta May 5th to 8th. We are informed that this meeting will be one of the most interesting and important in the history of the Association, and that there is now every indication of a large attendance. To those to whom this JOURNAL will come, we say: Lay aside your work for a few days and come up to witness the assembling of our leading doctors and teachers; mingle with them, listen to their discussions of medical and surgical questions, and you will go home pleased and better prepared for your labors. This will be an occasion which you cannot afford to miss. The journal of the Association says:

"A new era has dawned for American medicine, and the American Medical Association gives voice and expression to this more clearly than ever before.

"Local and State societies, and societies of specialists, all have a power and place in this movement, but the National society, of all others, must concentrate, mobilize, and direct this progress. The coming meeting will show a great advance in many ways, and higher ground will be occupied along many lines of science. The application in medicine of the new photography from the Roentgen rays will be presented with some new results. New discoveries of brain anatomy, and new facts along many practical lines of work, are already promised. The scientific outlook for the coming meeting is of unusual interest. National medicine has passed beyond any personal local influences and demands the best facts from every source. The village and country doctor is welcomed for any facts he may bring. Distinctions of place and position all become insignificant compared with truth and new facts and new evidence from any source.

"The many sectional meetings give every man a chance to compare his experience and opinions with others from all parts of the country.

"The Atlanta meeting will bring out a large number of active men in the new Southland who will be leaders in the years to come. All members from the West and North should embrace this opportunity to create a new scientific interest, and enlist a new class of men, who will bring new facts and new experiences to our work. It should be a duty and source of pride to every member of our Association to attend its annual meetings and prove to their home circle of friends that they are not merely medical hewers of wood and mechanical nurses, but scientific men interested in the great movements for the welfare of humanity.

"More than this, every member who attends the Association meetings secures a certain character and position, not only to himself personally, but to those he comes in contact with. This cannot be bought with money or power; it only comes from association and interest in medicine with others at these great national gatherings.

"Let every one show his interest in science, in humanity, and in the struggle against disease and death, and come to Atlanta, and he will go back stronger and better fitted for his work."

The officers of the association are: President, Dr. R. Beverly

Cole, California; Vice-Presidents, Dr. J. J. Chisolm, Maryland; Dr. J. C. LeGrand, Alabama; Dr. A. P. Clarke, Massachusetts; Dr. T. P. Saterwhite, Kentucky; Secretary, Dr. W. B. Atkinson, Pennsylvania; Treasurer, Dr. H. P. Newman, Illinois.

Following are the officers of sections for this meeting:

Practice of Medicine—Wm. E. Quine, Chicago, Ill., Chairman; DeLancey Rochester, Buffalo, N. Y., Secretary.

Surgery and Anatomy—C. A. Wheaton, St. Paul, Minn., Chairman; W. L. Estes, So. Bethlehem, Pa., Secretary.

Obstetrics and Diseases of Women—J. Tabor Johnson, Washington, D. C., Chairman; Reuben Peterson, Grand Rapids, Mich., Secretary.

Ophthalmology—Lucien Howe, Buffalo, N. Y., Chairman; Frank Alport, Minneapolis, Minn., Secretary.

Laryngology and Otology—G. V. Woolen, Indianapolis, Chairman; M. R. Ward, Pittsburg, Pa., Secretary.

Diseases of Children—A. C. Cotton, Chicago, Ill., Chairman; A. J. Work, Elkhart, Ind., Secretary.

Materia Medica and Pharmacy—F. E. Stewart, Detroit, Mich., Chairman; W. B. Hill, Milwaukee, Wis., Secretary.

Physiology and Dietetics—H. Bert Ellis, Los Angeles, Cal., Chairman; Henry Salzer, Baltimore, Md., Secretary.

Neurology and Medical Jurisprudence—T. D. Crothers, Hartford, Conn., Chairman; W. J. Herdman, Ann Arbor, Mich., Secretary.

Dermatology and Syphilography—L. D. Bulkley, New York City, Chairman; T. C. Gilchrist, Baltimore, Md., Secretary.

State Medicine—Chas. H. Shepard, Brooklyn, N. Y., Chairman; Elmer Lee, Chicago, Secretary.

Dental and Oral Surgery—R. R. Andrews, Cambridge, Mass., Chairman; Eugene S. Talbot, Chicago, Secretary.

The address of welcome will be delivered by Professor William

Osler, of Baltimore. The address on Surgery will be delivered by Professor Nicholas Senn, of Chicago, and Professor Geo. H. Rohe, of Baltimore, will deliver the address upon State Medicine.

The Chairman of the Committee of Arrangements is Dr. W. F. Westmoreland, Atlanta. The local Secretary is Dr. J. McF. Gaston, Jr.

The headquarters for visiting members and delegates will be the Hotel Aragon and Kimball House. The general sessions of the association will be held in the Grand Opera House. Halls for meetings of the sections have been secured.

Let everybody come!

AMERICAN ACADEMY OF MEDICINE.

The twenty-first annual session of the American Academy of Medicine will be held in the dancing-hall of the Hotel Aragon, Atlanta, Ga., on Saturday, May 2d, and Monday, May 4th, 1896.

The proprietors of the Aragon have made special rates for those who attend the meeting. It is confidently expected that the concession for one and one-third fare for the round trip, granted to the American Medical Association, will be available in time for those who desire to attend the opening session. The secretary invites correspondence on any of these topics, and also from those who may desire a copy of the completed program, when it is issued; full information will be promptly given on any of these subjects.

The Academy will meet in executive session, with closed doors, on Saturday, May 2, at 10 A. M. The open session for the reading of papers will begin at about 11 A. M. There will be a recess for lunch from 1 to 2 P. M. The "reunion session" and annual dinner will be held on Saturday evening. An executive session will be held on Monday morning, after which the special discussion on "Methods of Medical Education" will be the order of the day.

The Association of American Medical Colleges and the Confederation of the State Boards of Medical Examiners and Licensers have accepted the invitation of the council, and will participate in this discussion.

Following is list of papers promised:

"Laboratories and Hospital Work," the President's address, Henry H. Hurd, M.D., Baltimore, Md.

"Colonies for Epileptics," Frederick Peterson, M.D., New York city.

"Insanity in the South," J. T. Searcy, M.D., Tuscaloosa, Ala.

"Tuberculosis in Public Institutions," J. W. Babcock, M.D., Columbia, S. C.

"Vivisection," George M. Gould, M.D., Philadelphia.

Subject not yet given, Woods Hutchinson, M.D., Iowa City, Ia.

"The Confusion of Pharmacy Relating to the Theory and Practice of Medicine," Elmer Lee, M.D., Chicago.

"A National Board to License for the Practice of Medicine," Henry Leffman, M.D., Philadelphia.

Report of the Committee to Abstract the Laws Regulating the Practice of Medicine and to Suggest a Model Law, Perry H. Millard, M.D., chairman, St. Paul, Minn.

"Homicide," Paul Bartholow, M.D., Philadelphia.

"The Sociologic and Scientific Attitude of the Medical Profession," W. J. K. Kline, M.D., Greensburg, Pa.

"A Study of Some of the Distinguishing Features of the Homo Medicus," Charles McIntyre, M.D., Easton, Pa.

The discussion on "Methods of Medical Teaching" will be opened by a series of ten-minute papers, and in the open discussion to follow each speaker will be limited to five minutes. The opening papers are as follows:

"The Preparatory Mental Discipline for the Medical Student," F. H. Gerrish, M.D., Portland, Me.

"The Lecture and its Uses," Charles B. Penrose, M.D., Philadelphia, Pa.

"Text-book Recitation and its Advantages," DeLancey Rochester, M.D., Buffalo.

"Laboratory Methods," V. C. Vaughan, M.D., Ann Arbor, Mich.

"Clinical Teaching for Graduates in Diseases of Children," J. Madison Taylor, M.D., Philadelphia.

"The Seminary Method," Bayard Holmes, M.D., Chicago.

"Examinations," E. L. Holmes, M.D., Chicago.

"Students' Medical Societies," Roswell Park, M.D., Buffalo.

"State Examination," J. McPherson Scott, M.D. (of the Maryland Board of Examiners), Hagerstown, Md.

"The Best Method to Teach Anatomy," John B. Roberts, M.D., Philadelphia.

"The best Method to Teach Physiology," Charles D. Smith, M.D., Portland, Me.

"The Best Method to Teach Practice," J. C. Wilson, M.D., Philadelphia.

"The Best Method to Teach Surgery," J. S. Wight, M.D., Brooklyn.

"The Best Method to Teach Obstetrics," J. C. Edgar, M.D., New York city.

"The Best Method to Teach State Medicine," George H. Rohe, M.D., Catonsville, Md.

Correspondence is pending about some additional papers; if any more are promised, the titles will appear in the completed program.

The Secretary of the Academy is Dr. Chas. McIntire, Easton, Pa.

THE MEDICAL ASSOCIATION OF GEORGIA.

The forty-seventh annual session of the association will meet in Augusta April 15th, 16th, and 17th. It is hoped that there will be a large attendance of the State profession.

An interesting program of papers is being made up. Among those who have promised papers are: Dr. R. M. Harbin, Rome, "The After-Treatment of Tracheotomy Cases"; Dr. S. Latimer Phillips, Savannah, "Some Injuries of the Eyeball"; Dr. H. J. Williams, Macon, "Albuminuric Complications of Pregnancy"; Dr. W. F. Westmoreland, Atlanta, "Inguinal Hernia"; Dr. M. B. Hutchins, Atlanta, "Treatment of Skin Disfigurements by Electrolysis"; Dr. M. L. Boyd, Savannah, "Some Interesting Surgical and Gynecological Cases"; Dr. L. B. Grandy, Atlanta, "The Anesthetic"; Dr. A. G. Hobbs, Atlanta, "When do Adenoids and Polypi Cause Asthma and Hay Fever?"; Dr. E. H. Richardson, Atlanta, "The Medical Side of Appendicitis"; Dr. J. H. Shorter, Macon, "Asthenopia"; Dr. A. W. Sterling, Atlanta, "Glaucoma in Relation to General Practice"; Dr. C. H. Richardson, Montezuma, "The Best Treatment in Injuries of the Elbow-joint"; Dr. J. R. Shannon, Cabaniss, "Placenta Previa"; Dr. D. D. Quillian, Athens, "Suprapubic Operation for Fibroids"; and others. Dr. J. B. S. Holmes, Dr. F. W. McRae, and Dr. Bernard Wolff, of Atlanta, will read papers, titles not announced. This program will be very much extended by the time the association meets.

Be sure to go, and try to strengthen and build up your State Association.

THE ninth annual meeting of the National Association of Railway Surgeons will be held at St. Louis, April 30, and May 1 and 2, under the presidency of Dr. J. B. Murphy, of Chicago.

COLLEGE COMMENCEMENTS.

The closing exercises of the Southern Medical College, seventeenth session, were held in the Grand Opera House, March 30th. After prayer by Dr. Holderby, the dean of the college, Dr. Jas. B. Baird, made his report. He said that ninety-five students had been in actual attendance during the session, of whom eleven composed the graduating class. The college was the first in this State to adopt the three-years graded course and to exact an educational qualification preliminary to matriculation. These requirements had produced a small class, but had proven a marked benefit in raising the general character of the members. Professor J. McF. Gaston then read a memorial on the late Professor T. S. Powell, paying tribute in well-chosen words to the life and character of this good man and physician. The annual address to the graduates was delivered by Judge Howard Van Epps, President of the Board of Trustees, who chose as the subject of his remarks "The Family Physician." It is impossible in this place to give even an idea of this elegant address. It described in beautiful language the life and hardships of the family physician, and emphasized the wholesome lesson that a physician's first duty was to prepare himself thoroughly for his work.

The valedictorian of the class was Dr. E. L. Awtry, of Atlanta. The first honor was awarded to Dr. R. L. Whipple, of Georgia; the second honor to Dr. E. L. Awtry, of Georgia, and the third honor to Dr. Lucien Lofton, of Atlanta.

The commencement exercises of the Atlanta Medical College were held at the Grand Opera House on the evening of March 31, 1896. The stage was adorned with palms, and Wurm's orchestra furnished excellent music. Dr. I. S. Hopkins opened the exercises with prayer.

Dr. W. S. Kendrick, proctor, read his annual report, showing the gratifying attendance, and the good size of the graduating class in spite of this being the first class to graduate under the three-year course. The college has adopted a standard unexcelled by any Southern college, and will continue its progressive course. Rev. J. T. Plunkett delivered the annual address—a well written and well delivered oration.

The valedictory by Dr. R. H. Bell was beautifully written, full of good feeling and affection, and marks Dr. Bell as a master of good composition. Mr. (also Dr.) Frank Park, now a rising attorney, a graduate of the college in medicine, delivered the prizes in a few well chosen words.

Dr. K. L. Reid, of Canada, received first honor. Second honor was shared by Dr. Ned. C. Berry, of Florida, and Dr. J. T. Snider, of Georgia.

The following gentlemen received honorable mention: Drs. W. C. Sistrunk, J. R. Rose, J. S. Grady, S. J. Love, and R. H. Bell.

There were five graduates in the Department of Pharmacy, this being the third year.

The college has safely, and with credit, passed the first commencement under the three-years course, and can look forward to a constantly increasing attendance, a regular upward progression in its standard, and a continuance of its always excellent instruction.

THE sixth annual meeting of the Association of Military Surgeons of the United States will convene in Philadelphia on May 12th, 13th and 14th, 1896, and the indications are most flattering for the largest attendance since the organization; many distinguished representatives from the several military services of the United States, as well as a large gubernatorial detail from nearly every State in the Union, have been assured. An interesting program of scientific papers has been arranged to be read and discussed during the day sessions.

ANOTHER popular and prominent Atlanta physician passed away in the person of Dr. Nathan O. Harris, who died from appendicitis March 6th. Dr. Harris was ill a few days with what appeared to be a mild type of the disease, when suddenly symptoms of perforation developed and he was operated upon in a desperate condition. He survived only about thirty-six hours. He was forty-four years of age. No one in Atlanta was more generally known and esteemed. Dr. Harris came to Atlanta when a boy, and had practiced medicine here since 1880. He was ex-president of the Atlanta Society of Medicine, member of our State Association, member of the American Medical Association, and of the National Association of Railway Surgeons. He was local surgeon for the Seaboard Air Line, and surgeon to the Fourth Georgia Battalion. He had been for many years city physician for his ward, and in this connection he did an unusual amount of charity practice, much more than his office demanded. He was a true friend, a good physician, an honest man, and a worthy gentleman.

THE work of the Section on Neurology and Medical Jurisprudence at the coming meeting of the American Medical Association at Atlanta promises to be of unusual interest. The desire has been quite generally expressed to have discussions upon the following topics: "The Etiology of Insanity," "Expert Medical Testimony in Disputed Mental Cases," and "Medical Aspects of Crime." It is believed that these topics have a special medical interest at this time, and papers dealing with any phase of these subjects will be very welcome. An urgent invitation is extended to all members, whether they are expecting to be in attendance or not, to present papers and records of cases that have a bearing upon the topics mentioned, or upon any other neurological or medico-legal subject. Any persons who expects to contribute papers or reports to this section will greatly facilitate the business of the section by writing at once to the chairman, T. D. Crothers, M.D., Hartford, Conn., or to the secretary, W. J. Herdman, M.D., Ann Arbor, Mich.

SELECTIONS AND ABSTRACTS.

OBSTETRICS AND GYNECOLOGY.

EDITED BY DR. VIRGIL O. HARDON.

THE AFTER-TREATMENT OF CELIOTOMY.

REICHEL (*Archiv für klinische Chirurgie*, Band L, Heft 2) considers the question as to whether it is advisable after the operation of celiotomy to stimulate or depress peristalsis, and, further, what influence treatment has upon intestinal paresis or ileus. He believes that, regardless of the fact that the operation may be aseptic, there may be a migration of bacteria, that these bacteria may be distributed over the entire peritoneum and may possibly be quickly absorbed and destroyed, but that on the other hand, diffuse or circumscribed purulent peritonitis may result. Also, that if this purulent peritonitis is isolated the prognosis is always better. Granted that this is true, he concludes that in cases of intestinal resection and those celiotomies in which a portion of infected material is allowed to remain in the abdominal cavity, that the arrest of peristalsis is not advisable; that the administration of opium does harm. He advises that from the day of operation peristalsis should be slightly stimulated by the administration of small doses of saline water and the bowels should be opened on the second or third day. Should the symptoms of subacute intestinal paresis or ileus appear, probably due to intestinal adhesions, no food and only a small amount of water should be given; also that the stomach should be repeatedly washed out and opium given in suppository. Saline cathartics are now contraindicated. If the patient's condition improves, an enema of water containing glycerine should be administered. If, after twenty-four hours, or at the latest forty-eight hours, the patient's condition has not improved, the abdomen should be reopened. Where the trouble is thought to be due to mechanical occlusion of the intestine, as where there is advanced peritonitis, purgation is strongly contraindicated. Reichel believes that simple mechanical occlusion is rare; that the greater number of cases are due to paresis of the intestinal muscle wall where the intestine is bent upon itself or looped; that this paresis and the stenosis is increased and the bowel distended when artificial peristalsis is induced. Therefore this condition is best treated by keeping the intestinal tract at rest. The abdomen should be reopened where there is sepsis and where the symptoms point towards mechanical obstruction.—*Univ. Med. Magazine.*

NON NOCERE IN OBSTETRICS.

Dr. Julius Rosenberg, in *Medico-Surgical Bulletin,* says:

In obstetrics the axiom, *non nocere,* is of special significance. The birth of a child is a physiological act, yet it is often changed into a pathological condition as a result of ill-directed zeal on the part of the medical attendant. I hold that puerperal infection is an absolutely avoidable complication of childbirth, no matter what the surroundings. Before 1847 the mortality from puerperal infection in the Vienna General Hospital was 10 per cent. Then Semmelweis restricted the number of examinations, and required the washing of the hands in chlorine water. At the end of two years of this practice the mortality had been reduced to 1½ per cent. This fact alone is exceedingly instructive. It cannot be denied that the vagina of every woman contains micro-organisms, but these are not pathogenic. It has been demonstrated that not only is the vaginal secretion in normal pregnancy free from pathogenic germs, but it has been shown that the vaginal secretions possess a germicidal power. It has also been shown that syringing the vagina with an antiseptic solution destroys this germicidal power; hence the preliminary antiseptic douche is actually harmful. Leopold and Goldberg have published the statistics of several thousand cases of labor treated both with and without antiseptic douches, and their best results were obtained by omitting the preliminary douche.

Personally, I never employ vaginal douches except under strict indications, and every one of a considerable number of cases during the past few years has recovered. I have just seen a case of quick normal labor, in which the physician ordered carbolic acid douches three times a day, with the result that the woman now has a pulse of 140 and a temperature of 104, and all the symptoms of acute sepsis. It is true that the surroundings were not favorable; but I am sure that there were no indications for the douching, and I think that it was directly responsible in this case for the sepsis.

SIGNIFICANCE OF VAGINAL DISCHARGES.

A leucorrhea, inodorous or of mild odor, persisting during the climacteric, accompanied by increasing hemorrhage, is suspicious, and demands investigation.

A leucorrhea profuse, of peculiarly fetid odor, grumous, excoriating, appearing early or late during the climacteric, with profuse hemorrhage, is reasonable evidence of cancer of the cervix.

A leucorrhea moderate in amount, ill-smelling (the peculiarly fetid odor of cancer of the cervix being absent), accompanied by hemorrhage, suggests cancer of the corpus uteri.

A leucorrheal discharge with hemorrhage, containing material like the washings of meat, is said to indicate sarcoma.

A watery discharge, as a rule, occurring during menstruation, odorless or of little odor, persisting, accompanied by profuse hemorrhage, indicates fibroids; with little or no hemorrhage, polypi.

Profuse bloody discharges coming on gradually with declining menstruation, ceasing usually with the menstrual flow, point to fibroids.

Persistent profuse discharges of blood occurring spontaneously, arising from sudden exercise or coition, occurring, as a rule, after the menopause, indicate cancer.—MISH, *Pacific Medical Journal*, November, 1895.

EVERY tumor first noticed in the breast after the thirty-eight years' epoch is, in the great majority of cases, primarily malignant; in the remainder it is certain, sooner or later, to become associated with malignant features in one form or another.—SNOW, *Medical Record.*

GENERAL MEDICINE AND THERAPEUTICS.

EDITED BY DR. LUTHER B. GRANDY.

STYLE IN MEDICAL WRITING.

In a late address to medical students (*Journal of American Medical Association*) Dr. Edmund Andrews, of Chicago, gave expression to some excellent ideas on this subject:

It is amusing and yet vexatious to see a worthy medical gentleman whose ordinary conversation is in a simple and good style, suddenly swell up when he writes a medical article. He changes his whole dialect and fills his pages with a jangle of harsh technical terms, not one-third of which is necessary to express his meaning. He tries to be solemn and imposing. For instance, a physician recently devised a new instrument, and wrote it up for a medical journal under this title, "A new Apparatus for the Armamentarium of the Clinician."

Another writer wanted to say that cancer is an unnatural growth of epithelium. He took a big breath and spouted the following: "Carcinoma arises from any subepithelial poliferation by which epithelial cells are isolated and made to grow abnormally." Now, then, you know all about cancer.

The following is an effort to say that certain microbes produce the poison of erysipelas: "The streptococcus erysipelatosus proliferating in the interspaces of the connective tissues is the etiologic factor in the secretion of the erysipelatous toxins."

A large cancer of the liver was found at a post-mortem examination and reported about as follows: "A colossal carcinomatous degeneration of the hepatic mechanism."

Your man of solemn speech is peculiar. He does not keep a set of instruments—not he—he has an armamentarium. His catheters never have a hole or an eye in them, but always a fenestrum. In gunshot injuries, a bullet never makes a hole in his patient, but only a perforation. He does not disinfect his armamentarium by boiling, but by submerging it in water elevated to the temperature of ebullition. He never distinguishes one disease from another, but always differentiates or diagnosticates it. His patient's mouth is an oral cavity. His jaw is a maxilla. His brain is a cerebrum, his hip-joint is a coxofemoral articulation. If his eyelids are adherent, it is a case of ankylo-symblepharon. If he discovers wrinkles on the skin, they are corrugations or else rugosities. He never sees any bleeding, but only hemorrhage, or sanguineous effusion. He does not examine a limb by touch or by handling—he palpates or manipulates it. If he finds it hopelessly diseased he does not cut it off—that is undignified. He gets out his armamentarium and amputates it.

A good British surgeon has good culture and good common sense combined. He takes his trocar and taps a dropsy, for instance. Not so the American. He blushes to hear such plain speech from his British brother, but he takes his armamentarium and goes out straightway and performs paracentesis abdominis. Still the pompousness is not all on one side of the ocean, and it is refreshing to see an occasional touch of it beyond the seas, just to show that we are not the only sinners in this respect.

A celebrated British surgeon explains his opinions as follows: "Septic peritonitis, save where definable from evidence wholly extrinsic to the condition of the peritoneum, is an etiologic entity which exists only in the mind of the pathologic metaphysician." Nothing worse than this was ever written on our side of the water.

Two of the stilted phrases which have recently gotten into vogue are etiologic factor and etiologic entity. They are both snobbish substitutes for the plain English word, cause.

Such a language is the pure English of to-day. Derived mainly from the Anglo-Saxon, its words are chiefly monosyllables, but they are all gems, and all polished and fitted to each other by ages of use. Whoever is master of it, is an artist in the highest sense. Whoever thrusts into it a rough, harsh, polysyllabic word, crudely quarried out of a Greek or Latin dictionary, is like a fool who drives a pickaxe through a magnificent mosaic picture, and then plugs the hole with a brickbat.

The author who dumps upon us a book full of long and ragged new words, merely to display his knowledge of ancient languages, shows his ignorance of English, and brands himself as a bungler and a literary blockhead.

As I said before, use newly coined words sparingly, but when they become necessary, select them as carefully as you would choose jewels for your bride. Fit them, polish them, and make them suitable for flashing forth the best thoughts of human souls.

It is curious that the half-educated man who knows little or nothing of the classics, always dotes most on the big phrases, and is ever foremost in piling up the abominable rubbish-heap of long, scraggy words which deform medical literature, and render it a melanchollly spectacle to gods and men.

The finer culture of the future will demand a reorganization of our word system, and will cast to the moles and the bats very much worthless material which is now the pride of the ignoramuses who invented it. Prepare yourselves therefore for the change, and do your best to make the language of future science more bright, pure and simple, and more fit for the use of all who wish to couple clearness of thought with beauty of expression.

FEIGNED INSANITY.

The *Journal of Nervous and Mental Diseases* for March contains an abstract of a good paper by Dr. Jno. B. Chapin, Philadelphia, on this subject, and it is appropriate that we reproduce part of it at this time. The paper was an outline sketch of eight cases of feigned insanity that had come under the author's observation :

"All of these criminals were habitual law-breakers, or had been the associates of criminal and depraved persons. Two were under sentence of death; one had committed a homicide; one had assaulted with an attempt to kill; one was under indictment for bigamy; and one was a thief and professional feigner. All had committed crimes and feigned insanity after conviction and sentence, or after indictment. All had had opportunities of seeing insane persons—were possessed of some degree of low cunning, and probably had the faculty of imitation. Three showed some of the common manifestations of advanced dementia, and one epilepsy. They affected these forms as probably requiring less physical exertion and mental strain. Two appeared to be maniacal for a brief period; and two showed no characteristic symptoms of any form of insanity—their acts being in the nature of small tricks. In two of the cases, the earliest manifestations that attracted attention were howling and shouting in the night, and throwing torn clothing and bedding out of the cell doors. In every case the simulation began suddenly, and presented forms of mental disorder that require ordinarily for their development the lapse of months and years. There was in every case a sufficient motive to resort to any effort or scheme to escape punishment.

"It is the usual experience that the symptoms presented to the physician are demonstrative, pronounced, and such as to attract attention at once. This was true in all these cases. This may arise from the belief that prevails among the common people and the inexperienced, that insanity appears suddenly, and is accompanied by some sudden and marked change in the individual. As a rule, I have found it difficult or impossible to obtain any satisfactory history of these cases prior to the commencement of the supposed attack. It is of rare occurrence that the case has even come under the intelligent observation of a jail physician prior to the outbreak, or indeed, of any person but a guard or some perfunctory attendant; so that the physician is thrown mainly on his own resources for information, and must frequently contend with unwilling witnesses. It has been my experience usually, to be unable to obtain from any physician or any person related to the case, any notes of observation, or any facts having any bearing on the case.

"If a physician in the course of his official duty is called in the interest of public duty and justice to examine and give testimony in relation to a person suspected of feigning, how shall he proceed to perform the service? In this direction he will obtain few or no suggestions from medical literature, as it is limited in amount and extent, and, as has been stated, he will derive little aid from persons in any way related to the case, and the history of the case will probably be limited and perhaps unreliable.

"In the first place, while he knows from observation and experience that there is a uniformity of forms and types of mental disorder, it will be found that every one of these shammers present some peculiarity that is a separate and special study—just as men differ from each other in their normal conditions, and as cunning and practised villains will devise new schemes to aid them in their simulation.

"While the physician must approach the examination of these cases without bias, and with such judicial calmness as he can command, he must take into account the fact that a dominating motive exists in the mind of the prisoner or suspect to deceive, for it is a part of the case.

"As to any rule or tests of precision to be followed in these cases, I know of none but those determined by experience and observation. Every physician concedes that the cases he meets in the ordinary line of duty proceed according to some recognized course of development. For instance, he does not look for a characteristic typhoid eruption nor developed small-pox on the first day of the sickness. If he does find these indications on his first visit he properly concludes there have been developmental or prodromal stages which have passed, and he can even name the day of the duration of the disease. There is an order of development of all diseases which constitute a rule; if there are exceptions, they must be accounted for on the hypothesis that they are instances of the limitations of our present knowledge.

"It is true also of mental cases that in accordance with a rule as infallibly fixed as in the diseases the general practitioner deals with, there is a general and uniform order of development in every case. Observation and uniformity of experience makes the rule, though there may be exceptions here, which is but another term to indicate that there are limitations of our actual knowledge. If, for example, a man on trial is able to sit with his counsel, suggest questions and a line of defense, making an allegation of insanity at the time of the homicide or during his trial—preferring to show that he acted in self-defense—and, when convicted, shall suddenly become reticent, saying he was engaged upon great inventions and did not wish to be disturbed; manifesting generally delusions of suspicion and fixed ideas, such as belong to the terminal stage of chronic insanity—we are unable to recognize a prodromal or primary stage. This is incompatible with general experience. We cannot reconcile the inconsistencies. The case in a usual order of procedure is thus exactly reversed. Yet referring to this case and to others, we see a man whom to look upon is observed to be doing what insane persons actually do. He is engaged, however, like the actor in the play—doing a part—in itself, perhaps, admirably done. It is then for the physician to close his eyes, and on reviewing the whole, to determine whether it is in accord with his actual clinical experiences. Acute mania, or apparently complete or stuporous dementia, do not develop in a day to a degree that weeks and months of disease are actually known to be necessary to produce. The terminal stage usually does not take precedence of the primary.

"It may be said, then, in conclusion, that no ascertained test of determining real from feigned insanity absolutely exists, except the rule of experience and the results of observation. The physician must enter upon the examination of these cases free from bias, with a judicial temper, about as he would proceed to form an opinion of any obscure case that might present in his every-day experience. For myself, I have usually appeared to those persons casually, and engaged them in conversation, if possible, or observed them when they refused to talk. I have never concealed the object of my visit when asked, nor my profession, but have announced it before the visit finally terminated. The endeavor should be made, I think, to ascertain the existence of consistencies, or inconsistencies; to ascertain the presence of bodily complications, and constitutional sympathetic disturbances—disturbances such as might be looked for to make out a symmetrical whole. After all efforts to reach a satisfactory conclusion have been exhausted, even after sufficient time which is essential has been allowed to elapse, it is still possible that human judgment may err, but it is not probable."

PRACTICAL SUGGESTIONS TO MEDICAL EXPERTS.

Hon. Tracy C. Becker, Professor of Medical Jurisprudence in the University of Buffalo, has suggested the following practical rules and admonitions for medical witnesses:

First. A physician should refuse to testify as an expert unless he is conscious that he is really qualified as an expert.

Second. After accepting the responsibility, his first duty should be to make a diligent examination and preparation for his testimony, unless it is upon a subject with which he is familiar and which he is satisfied he has already exhausted, by reading the best authorities he can find, and by careful reflection upon particular questions as to which his opinion will be asked.

Third. Where he is to make an examination of facts, such as the post-mortem examination of a body, a chemical analysis, or an examination of an insane person, he should insist upon having plenty of time and full opportunity for doing his work thoroughly. He should take particular pains to make his examination open and fair, and, if possible, should invite opposing experts to co-operate with him in it.

Fourth. He should be honest with his client before the trial in advising him and giving him opinions, and upon the trial should preserve an absolutely impartial attitude, concealing nothing, perverting nothing, exaggerating nothing.

Fifth. On the preliminary examination as to his qualifications as a witness, he should be frank and open in answering questions. He should state fully the extent and the limits of his personal experience and of his reading upon the subject, without shrinking from responsibility, yet without self-glorification.

Sixth. He should be simple, plain, and clear in his statement of scientific facts and principles, avoiding the use of technical language, and trying to put his ideas in such form that they will be grasped and comprehended by men of ordinary education and intelligence.

Seventh. He should avoid stating any conclusions or principles of which he is not certain, but having an assurance that he is right, he should be firm and positive. He should admit the limitations of his knowledge and ability. Where a question is asked which he cannot answer he should not hesitate to say so; but he should refuse to be led outside the subject of inquiry, and should confine his testimony to those scientific questions which are really involved in the case or in his examination of the case.

Eighth. And, finally, he should always bear in mind that at the close of his testimony an opportunity is usually given to him to explain anything which he may be conscious of having said which requires explanation; and partial statements which need a qualification to make them a truth. This is the physician's opportunity to set himself right with the court and with the jury. If the course of the examination has been unsatisfactory to him, he can then, by a brief and plain statement of the general points which he has intended to convey by his testimony, sweep away all the confusion and uncertainty arising from the long examination and cross-examination, and can often succeed in producing for the first time the impression which he desires to produce, and can present the scientific aspects of the case briefly and correctly.

GONORRHEA.

Dr. Martin gives the following prescriptions as the best and most effective of some several thousands examined and used by him in the treatment of gonorrhea. Early stage:

℞	Acidi carbolici	m. xx.
	Opii aqueosi extr	gr. xx.
	Acidi boraci	dr. ss.
	Liq. plumbi acetatis q. s. ad	fl. oz. vi.
℞	Hydrarg. chlor. corros	gr. $\frac{1}{8}$.
	Sodii chlor	dr. j.
	Aquæ	fl. oz. vi.
℞	Potass. permanganatis	gr. $\frac{1}{2}$.
	Sodii chlor	dr. j.
	Aquæ	fl. oz. vi.
℞	Argent nitrat	gr. j.
	Aquæ	oz. j.

Sig. Use gtt x in a tablespoonful of water.

℞	Acidi carbolici	gr. xxx.
	Sodii chlor	dr. j.
	Aquæ, q. s. ad	fl. oz. vi.
℞	Potass. permanganatis	dr ss.
	Aquæ	fl. oz. iij.

Sig. Add two teaspoonfuls to a quart of water, to which is added two teaspoonfuls of salt. Use in a fountain syringe and irrigate bladder.

In all of the preceding prescriptions, except the last, use one syringe full to wash out the urethra and allow it to flow out at once. Then use another syringe full and keep this in contact with the membrane for three minutes before allowing to escape. For the last stage:

℞	Zinci acetatis	gr. xxx.
	Acidi tan	gr. xxx.
	Aquæ rosæ	fl. oz. vi.

℞	Extr. hydrastis fluidi,	
	Bismuthi subcarbonatis	aa. dr. ij.
	Glycerini	fl. dr. ij.
	Aquæ, q. s. ad	fl. oz. vi.

℞	Zinci sulph.	
	Aluminis (pulv.)	aa. gr. v.
	Acidi carbolici	gr iv.
	Aquæ, q. s. ad	fl. oz. vi.

℞	Zinci sulphatis	gr. xv.
	Plumbi subacetatis	gr. xx.
	Tinct. opii	fl. dr. ij.
	Tinct. catechu	fl dr. j.
	Aquæ, q. s. ad	fl. oz. vi.

Internally the doctor administers:

℞	Bals. copaibæ,	
	Oleoresinæ cubebæ,	
	Pepsin,	
	Salol	aa. gr. v.

Misce et ft. capsulam j.
Sig. Two capsules after each meal.

℞	Ol sandal	m. v.
	Bals. copaibæ	m. v.
	Ol. cinnamoni	m. j.

Misce et ft. capsulam j.
Sig. Two capsules after each meal.

In all applicable cases the doctor prefers the method of irrigation by the fountain syringe, the drawback being the difficulty of keeping the permanganate solution from splashing from the urethra and staining the clothes of the physician who administers the douche.—*Medical World.*

DIPHTHERIA ANTITOXIN FROM THE CLINICIAN'S STANDPOINT.

At a recent meeting of medical practitioners held in New York city, Dr. A. Caillé opened a discussion regarding the present status of the diphtheria antitoxin viewed from a clinical standpoint. He presented a brief up-to-date *résumé* of the subject, and offered some suggestions as to the clinical indications for the exhibition of Behring's remedy.

Caillé stated that Behring's antitoxin has now been on trial for more than two years over the entire civilized world, and, after every possible allowance for exaggeration and error has been made, the fact remains that the discovery of Behring is one of the greatest of modern times.

The precise action of antitoxin, Caillé said, is not known; but the same may be said of iodide of potassium, antipyrin, thyroid extract, mercury, and many other remedial agents whose beneficial and curative effects are universally recognized. From a study of the voluminous literature and also from what personal experience has taught, it is admitted that occasionally an exanthem or joint swelling follows the subcutaneous administration of antitoxin. Such manifestations are not sufficiently grave to contraindicate the employment of the remedy, for they are not attended with danger to life.

More than 100,000 injections of serum antitoxin have been made, and no reliable proof has been established that in a single instance death could be directly attributed to the treatment.

The author believes that a study of all cases goes to show:

1. That serum antitoxin has a specific curative and immunizing action.

2. That the frequency of complicating nephritis in cases of diphtheria treated by antitoxin is diminished as compared with diphtheria cases without specific treatment.

3. That the frequency of albuminuria and post-diphtheritic paralysis appears to be about the same as before the introduction of the serum therapy.

4. The prevention and cure of laryngeal diphtheria without intubation or tracheotomy, and the shortening of the period for wearing the tube in instances demanding such interference, are among the most striking and convincing results of the specific treatment.

5. Supplementary measures (stimulation and *mild* local treatment) must not be neglected.—*Am. Med.-Surg. Bulletin.*

SKIN DISEASES AND SYPHILIS.

EDITED BY DR. M. B. HUTCHINS.

SLEEP IN ITS RELATION TO DISEASES OF THE SKIN.

Dr. L. Duncan Bulkley, of New York, had a very valuable article on this subject, now reprinted, in *New York Medical Record* of November 20, 1895.

He sums up as follows:

"1. Sleep is an exceedingly important factor to consider in connection with many diseases of the skin, disorders in sleep occurring both as a contributing cause and as an effect of the same.

"2. The disorders of sleep occurring in patients with diseases of the skin may arise from many different conditions; the six principal causes may be classed as, *a*, digestive; *b*, toxic; *c*, circulatory; *d*, nervous (direct or reflex); *e*, psychic; and *f*, cutaneous.

"3. These causes of disturbances of sleep should be searched for and relieved, because of the injury resulting from imperfect sleep in producing or aggravating many diseases of the skin.

"4. In cases where the sleep disturbance is caused by the disease of the skin, the effort should be made to get relief to the insomnia by the proper internal and external treatment of the skin affection, before resorting to hypnotics; attention to details is often very necessary to secure this end.

"5. Preparations of opium may be resorted to when the disturbance of sleep is caused by pain connected with the skin disease, but these are useless or harmful when the wakefulness results from itching. Chloroform or ether are also not to be advised for this purpose.

"6. Some of the newer so-called anti-neuralgic and hypnotic remedies are often of great service in quieting the general irritation and inducing sleep, and gelsemium and cannabis indica are also valuable. It is often desirable to give repeated doses, at half-hour intervals, until the desired effect is produced."

LEADWATER IN SKIN THERAPY.

(Dr. C. Boeck, *M. für Prak. Derm.*, xxi. No. 3.)

In inflammatory, severely itching, non-oozing skin diseases, the following very simple treatment is recommended:

℞ Talc. pulv.	
Amyli	aa ʒi gr. xl.
Glycerine	m. xl.
Aquæ plumbi	ʒiii *M.* xx.

M. Shake before using, add an equal quantity of cold water, so that it becomes very thin, and apply with an artist brush, or cloth, to the affected skin. Drying very rapidly, binding on is not necessary.

It is both a cooling wash and powder, and therefore to be recommended not only in acute, but also in many very itchy, chronic eczemas—especially of the anus and genitals. Contraindicated in "weeping" conditions.—*From Centralblatt für Chirurgie, No.* 8, '96.

COLLES'S LAW IN A PROFESSIONAL NURSE.

Dr. Brocq also reports above case of Dr. H. Feulard. The woman's child had *hereditary* syphilis—absolutely no evidence of present or previous syphilis in the mother. Fournier later confirmed the diagnosis in the case of the child. Dr. Brocq remarks upon the mother having borne a syphilitic child, with no apparent symptom of the disease in herself, and her having nursed the child without contracting a mammary chancre. Dr. Feulard justly held that such a mother would be an unsafe wet-nurse, but safe for an already syphilitic infant, in which case she would be an ideal nurse. —*Journ. Cut. and Gen.-Ur. Dis., Jan.*, 1896.

PSORIASIS TREATED BY MERCURIAL INJECTIONS.

Two cases of this disease are reported by Dr. J. Brault. Various attacks had been relieved by the usual remedies. In the last outbreak five centigrammes of yellow oxide of mercury were injected March 16th, 1895; four other injections by April 16th, and from May 9th to June 17th three hypodermics of ten centigrammes each.

On May 23d, all trace of eruption disappeared. The two cases were identical.—*Dr. Brocq's Paris Letter Journ. Cut. and Gen.-Ur. Dis., Jan.,* '96.

EXTENSIVE CHANCROID—CLINIC CASE.

Case of prostitute. History of an operation for hemorrhoids about a year ago. Later the development of ulcerous lesions—"thought" by patient to be of cancerous nature. Examination revealed almost complete destruction of the perineum, and margins of the anus, right labium minor perforated, and an indefinite extension into the vaginal walls. Ulcerous surface large, granular edges sharp cut, soft. A sanious fluid oozing from vagina.—*M. B. H.*

SURGERY.

EDITED BY FLOYD W. MCRAE, M.D.

THE INCREASE OF CANCER.

Mr. Roger Williams, F.R.C.S., in a recent paper read before the Lancashire and Cheshire Branch of the British Medical Association, calls attention to the continuously progressive increase in the cancer mortality. He shows that whereas in 1840 the cancer death-rate was 177 per 1,000,000 living, in 1893 it had risen to 711, and that the proportion of cancer deaths to total deaths had risen from 1 to 129 to 1 to 27 during the same period. He says that, if unchecked, cancer will erelong become one of the commonest diseases of modern communities. Even now cancer causes more than four times as many deaths as typhoid fever; but while medical officers of health devote so much attention in their reports to the latter disease—which is decreasing—they hardly ever allude to the former—and I believe they consider cancer outside their sphere. Mr. Williams calculates that there cannot be fewer than 42,000 persons now suffering from cancer in England and Wales; whereas in 1840 the number was only about 5,500. This increase he cannot account for by mere increase of population, as its increase has been proportionately much in excess of the population increase; nor can it, he thinks, be ascribed to improved diagnosis or other casual error.

Attention is directed to the remarkable decline in the death-rate from phthisis and other tubercular diseases that has coincided with the great increase in the cancer mortality. The latest ascertained cancer death-rate is the highest on record, while that from tubercle is the lowest. "I regard," he says, "this decline in the prevalence of tubercular disease as the outcome of improved hygienic conditions, due to augmented national prosperity, which, as I have elsewhere endeavored to show, by its action in another direction, is also responsible for the increased cancer mortality." Thus there appears to be some truth in the curious paradox that a high cancer mortality is an indication of good sanitary conditions.—*Quarterly Medical Journal.*

THE TREATMENT OF SPRAINED ANKLE BY ADHESIVE STRIPS.

This method of treating sprained ankle, which is said to have originated with Dr. Wm. R. Davis, U. S. A., is thus described by Dr. V. P. Gibney, who has done much to perfect it (*New York Medical Journal*): For a sprain above the external malleolus, a strip of rubber plaster about twelve inches in length is applied, beginning at the outer border of the foot, near the little toe, and extending to the inner side of the foot, above its middle, just above the plantar arch. The second strip is applied vertically, and passes from the junction of the middle, with the lower third of the leg down alongside of the Tendo Achillis, over the heel, and terminating at a point just above the internal malleolus; but posterior to this, other strips are applied in the same way, one overlapping the other about one-half, until the whole external malleolus and side of the foot up to the middle third of the leg is covered. It is well to reinforce just above the malleolus, by strips passing criss-cross, for additional support. The strips should well overlap each other, especially over the tendon Achillis and heel. The ankle should not be completely encircled, so as to avoid constriction. When the sprain involves the tarsal or metatarsal joint and the whole foot is edematous, the strips are applied as follows: The first one is placed on the inner side of the heel, passes back to the heel below the external malleolus, over the dorsum of the foot, and terminates u st under the ball of the great toe. The second is started under the external malleolus, passes over the back of the heel, over the foot, and terminates under the outer side of the foot, near the small toe. Sometimes extra strips are also applied up and down the tendon Achillis, the ends terminating on the sole of the foot. Over the ankle thus strapped a cheese cloth bandage is simply applied, up to the middle third of the leg.

GASTRIC, INTESTINAL, AND RECTAL HEMORRHAGE.

In a paper (*Mathews Quarterly*) Dr. T. H. Manley, of New York, closes with the following summary:

First. Hemorrhage from the rectum may be symptomatic, of constitutional or organic disease, as plethora or hepatic congestion, etc.

Secondly. In consequence of a lesion of some part of the digestive tube, anywhere from the flexure to the cardiac end of the stomach, bleeding may escape, changed or unchanged, through the rectum.

Thirdly. The local lesions, in their order of frequency, as a source of hemorrhage, in the ileo-rectal outlet of the intestines are: (a) hemorrhoids, (b) simple or tubercular *ulceration*, (d) malignant disease.

Treatment includes constitutional and local measures.

Hemorrhage from simple, tubercular, cancerous, dysenteric, or typhoidal ulceration, in any part of the digestive tube, above the rectum, is quite beyond relief from direct surgical methods, and hence its treatment must, for the present at least, remain within the domain of medicine.

Surgical treatment of hemorrhage of the rectal-pouch and anus when non-malignant is generally *practicable*, safe, and permanent in results. In order, however, to be rendered effectual and definite thorough *dilatation* of the anus and eversion of the rectum are imperative in order that the bleeding points or source of hemorrhage may be brought under the immediate eye for direct and radical measures.

When bleeding succeeds from hemorrhoids for the first time, or when its quantity is small, moderate catharsis, with simple astringents in the form of suppositories, will favor its arrest, without recourse to radical or severe methods.

MEDICAL ITEMS.

THE heart bowed down by weight of woe,
The eyes that weep, the lips that quiver,
Are often largely due, we know,
To torpid liver. — *Washington Star.*

DR. J. H. GOSS, of Athens, will sail this month for Europe. We hope the doctor will send us some letters.

DR. C. H. TEBAULT, of New Orleans, succeeds the late Dr. Joseph Jones as Surgeon-General of the United Confederate Veterans.

DR. W. L. WRIGHT, formerly of Lost Mountain, Ga., has moved from Dundee to Brandon, Texas. He says, "Hurrah for the JOURNAL!"

DR. JAMES L. CAMPBELL has opened an office at No. 117 W. Mitchell St., where he will do a general practice. We wish him much success.

"MY books show that I have had a practice of $4,000 in the last year," said a physician. "Is your pocketbook included in the showing?" asked a bystander.

ACCORDING to the Indiana *Medical Journal*, W. R. Amick, of consumption-cure fame, is now a victim of consumption at Scipio, Ind. "He saved others; himself he cannot save."

THE American Medical Publishers' Association will hold its third annual meeting in Atlanta, Monday, May 4th. Important business will come before the association, and a large attendance is desired.

A **TENNESSEE** subscriber in renewing his subscription says: "The JOURNAL is the best monthly I have ever seen." Another stopped his subscription, and after three months, wrote to renew, asked for back numbers, and said he could not do without the JOURNAL.

NEVER use any ether for inhalation which has been left over. A fresh bottle should be opened for each operation. It is the deterioration of the ether by contact with air that is the principal cause of inflammation of the respiratory tract following its inhalation.—*Ex.*

THE "medical item" in our February issue, on top of page 770, should have been credited to the *Journal of the American Medical Association.* It is a felicitous thought well expressed, and all the honor rightly belongs to the bright editor of the above journal.

WITH the March issue the New Orleans *Medical and Surgical Journal* passes into the hands of Dr. Charles Chassaignac and Dr. Isadore Dyer. This is one of the oldest, most successful, and most deserving of Southern journals. We take pleasure in wishing it continued prosperity under the new management.

THE third International Congress of Dermatology will be held in London August 4th to 8th. The official program contains a number of important papers relating to skin diseases and syphilis. The American secretary of the congress is Dr. George T. Jackson, 14 East 31st St., New York, who invites correspondence from those wishing to attend.

THE directors of the Post-Graduate Medical School and Hospital have named one of their wards in memory of the late Dr. Charles Carroll Lee, who was for many years a professor in the institution. They have placed a tablet in the ward giving the names of those who combined to contribute the ten thousand dollars which was given for the purpose of the memorial. The faculty of the institution participated largely in the memorial gift.

WHAT shall the X-rays in photography be called? Already the suggestions are almost legion. Among these we note "Roentography," obviously objectionable; "electroskiography" and "electrography," which are unwieldy; "skiography," not so bad, but, according to the British *Medical Journal*, at least legitimate in structure and valid as to title; "radiography," "actinography," and "scotography" are inaccurate. Whoever suggested "shadowgraphy" should be cast into outer darkness.

THE American Medical Association meets in Atlanta, Ga., May 5th, and all delegates to this society should embrace the opportunity of visiting "Lookout Inn," a magnificent and historic spot on the crest of Lookout Mountain, overlooking Chattanooga, Tenn. A special invitation is extended to physicians to spend a week with us, *en route* to Atlanta, and a complimentary rate will be made for the occasion. Trains up the mountain make close connections in both the Central and Union depots, Chattanooga, running through to the Inn without change. For further information and handsome, illustrated booklet, address M. S. Gibson, Lookout Mountain, Tennessee.

THE much advertised "S. S. S." is said to be composed of fluid extract of smilax, sarsaparilla, fluid extract of stillingia sylvatica, fluid extract of lappa minor, fluid extract of phytolacca decandra (each 16 parts), and tincture of xanthoxylum (8 parts); some nitrate of potash and a small quantity of iron are added, and enough alcohol to preserve it. "P. P. P." is made of fluid extracts of phytolacca, stillingia, sarsaparilla, xanthoxylum, with some compound tincture of gentian and iodide of potash. Radam's "Microbe Killer," is a mixture of impure sulphuric acid, four drams; impure muriatic acid, one dram; red wine, one ounce, with one gallon of water. Royal Germetuer is made by the addition of one pint of muriatic acid to a barrel of water. The Electropoise is composed of a nickel cylinder, to which is attached one end of a copper wire. The other end receives the confiding and deceived patient.

THE National Confederation of State Medical Examining and Licensing Boards will hold its fifth annual meeting in the Aragon Hotel, Atlanta, May 4th, at 10 o'clock. The objects of this conference are to discuss questions that pertain to State licensing with a view to a comparison and the improvement of methods, a collection and dissemination of information on the subject, and to consider any and all propositions that have for their object the advancement of the standard of medical education in the United States.

Dr. Chas. McIntire, of Pennsylvania, will read a paper on "Some Obstacles to an Interstate Recognition of a State License to Practice Medicine, with Suggestions for their Removal."

Dr. Jas. M. Mathews, of Louisville, Ky., and Dr. Wm. L. Foster, of Pittsburg, Pa., will also read papers.

The officers are: President, Dr. William Warren Potter, of New York; Vice-President, Dr. Jas. M. Hays, of North Carolina; Secretary and Treasurer, Benj. M. Griffith, of Illinois.

Members and ex-members of examining boards are specially invited to attend this meeting and take part in the discussions.

BOOK REVIEWS.

THE FUNCTIONAL EXAMINATION OF THE EYE. By John Herbert Claiborne, Jr., M.D., New York. The Edwards & Docker Company, Philadelphia.

This little book is just before us, and for fear that others like ourselves may not understand just why its author produced it, we will quote the closing lines of the introduction: "The book is a result of a course of lectures delivered for a number of years at the New York Polyclinic, and more particularly of a course in practical instruction given by the author in the College of Physicians and Surgeons, New York."

With such clear, practical, and concise little books on Refraction as those by Valk, Hartridge, Tiffany, and others, it is difficult to see how any one could fall into the error of publishing even a little book upon this subject, unless its contents were to be marked by some distinct originality.

Had the author of the present little book confined the copies of the same to the pupils who had listened to his instruction, then there might be some reason for the publication of these lectures, but how the medical profession could be benefited, and especially ophthalmologists, by perusing their pages, we fail to comprehend.

The lectures are gotten up in a very neat and handy form, and the print is unusually clear and good. A few typographical errors somewhat mar its excellency. For instance, on page 55 we read "cylindrical glasses *reflect* only those rays," etc. We readily understand that the author does not hold that the rules thus laid down by him are sufficient for fitting lenses to eyes, but that they apply only to the test cards and trial lenses as one step in the thorough examination. Of course to those who are familiar with refractive work the present book cannot possibly do any harm, for they will absorb only the good portions of it; but to those who are not so fortunate, we think that some of the teachings might lead such astray. We refer, for instance, to the author's method of fitting lenses for myopic astigmatism, as described on page 60.

The fallacy in this method lies in the fact that hyperopic frequently simulates myopic astigmatism, which can only be revealed by retinoscopy, the ophthalmoscope, or some mydriatic. We hold that no eyes, with the exception of presbyopic, should be fitted by test lenses *alone*.

It was not our intention to make such a marked criticism on our review, but honesty demands that reviewers should try and be truthful instead of lauding every book to the profession, w..ether it be good, bad, or indifferent. As written, the author has certainly placed it in attractive form, and we trust his labors will not be entirely unrewarded. D. R.

SYPHILIS IN THE MIDDLE AGES AND IN MODERN TIMES. By Dr. F. Buret, Paris, France. Translated from the French, with notes, by A. H. Ohmann-Dumesnil, M.D., Professor of Dermatology and Syphilology in the Marion Sims College of Medicine. Being Volumes II. and III. of "Syphilis To-day and among the Ancients," complete in three volumes. Extra Cloth, $1.50 net. The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street, Philadelphia.

The completion of this interesting work, the first volume of which attracted such favorable attention three or four years ago, will be very welcome. By these historical researches Dr. Buret has certainly thrown a flood of light upon the ancient history of syphilis, and has well succeeded in clearing up a great deal that was uncertain, traditional, or even mythical.

The first volume discussed syphilis in ancient and prehistoric times. Here the author demonstrated the evidences of syphilis in prehistoric remains, and traced the disease to the most ancient historic epochs. He says that syphilis never sprang into being *de novo*, and never died out. Coming to the middle ages and modern times (in the present volume) the author includes the history of the disease up to the siege of Naples by the French king, Charles VIII. (1495), and from that time to the present. During the middle ages, through a period of about one thousand years, syphilis always existed in an endemic state, especially in places of debauchery.

From time to time it disseminated itself in different countries through large movements of people. Current leprosy, which once included a variety of skin affections, finally came to designate a venereal disease acquired by coitus. The common leprosy of that time was syphilis. Therefore the disease could not have burst upon the world anew at the siege of Naples in either of the opposing armies, although the wars of that time, with attending immorality and disregard of hygiene, furnished the most favorable opportunities for its dissemination. Of course America is vindicated of the charge, once taught, of having infected the old world through the persons of Columbus and his followers.

The author has ransacked history and classical literature for material for this book, and his results will be a monument to him. Any one can read this work with profit; no one at all interested in the subject of syphilis should fail to read it. The author has made the entire medical profession his debtor. The translation is excellent, preserving almost entirely the pleasing style of the author. While some of the author's conclusions may appear ultra, or otherwise open to criticism, we think he has established beyond question his leading proposition, that *syphilis is a contemporary of all ages.*

AN ATLAS OF THE NORMAL AND PATHOLOGICAL NERVOUS SYSTEMS, together with a Sketch of the Anatomy, Pathology and Therapy of the Same. By Dr. Christfried Jakob, practicing physician in Bombay, formerly first assistant in the Medical Clinic at England. Translated by Jos. Collins, M.D., Instructor of Nervous Diseases, New York Post-Graduate Medical College, etc., etc. Published by William Wood & Co., New York.

The author has divided the atlas into six sections. Section I. treats of the morphology of the nervous system. Sec. II. elaborates the development and structure of the nervous system. Sec. III., on the topographical anatomy of the brain, cord, and peripheral nerves in serial plates. Secs. IV. and V. treat of the general and special pathology of the cerebro-spinal system.

These five sections are all demonstrated by means of plates, which are most exquisite, both from anatomical and artistic standpoint. The text explanatory of the plates is lucid and very comprehensible. That the intricate anatomy of the brain and cord have been so distinctly and graphically demonstrated is indeed an achievement in histological anatomy.

Up to the present, this work is the most complete that the writer has seen, and is, in his opinion, destined to be an authority on the cerebral and spinal anatomy.

In Section VI. some valuable points on the technique of an autopsy are given, the study and observation of which will be of much service to all workers in this field.

Had the author stopped here, I think the work would have been complete, without the appendix of the laconic and very limited synopsis of the treatment of diseases of the nervous system. The subject-matter of this chapter is too great and important to be discussed with a few desultory remarks, and we think it were better had the treatment been left out; not that what is given is not worthy, but too incomplete. The translator has doubtless done the original justice, which is to say that he too has wrought with skilled hands and clear intelligence. The publishers are to be praised for the neatness and agreeable execution of this work. H. H.

MEDICAL JURISPRUDENCE, FORENSIC MEDICINE, AND TOXICOLOGY. By R. A. Witthaus, A.M., M.D., and Tracy C. Becker, A.B., LL.B., and a staff of collaborators. In four royal octavo volumes. Volume III., Forensic Medicine (continued). William Wood & Company, New York.

The third volume of this excellent work continues the general subject of Forensic Medicine commenced in Volume II. The first article is by Dr. J. H. Woodward, on "Vision and Audition in their Medico-Legal Relations." The subject is an extremely important one, particularly to the physician in his capacity of expert, since derangements of sight or hearing, real or feigned, play a most important part in many lawsuits.

The next paper is on "The Medico-Legal Aspect of Insurance," and this topic has been ably handled by David Murray, Esq., and G. J. Edwords, Esq., well-known experts in this line.

The next section on "Insanity in its Relations to Medical Jurisprudence," by Dr. E. D. Fisher, is the largest article in the book, occupying over 200 pages, and its author's well-known reputation in this branch of medicine is sufficient guaranty of the value of his contribution.

The next paper, on "Mental Unsoundness in its Legal Relations," is by T. C. Becker, Esq., one of the associate editors of this work, and, coming from the pen of a practical lawyer, is a most valuable contribution to the literature of the subject.

The last section is on "The Care and Custody of Incompetent Persons," by the Honorable Goodwin Brown. The article is a perfect epitome of the legal and medical sides of this subject, with an abstract of the laws of the various States that bear upon it.

The third volume amply justifies the promise that this set of books will, when completed, be of exceptional, if not of indispensable, value both to the practical physician and to the lawyer.

PRENANCY, LABOR AND THE PUERPERAL STATE. By Egbert H. Grandin, M.D., and George W. Jarman, M.D., Obstetric Surgeons to the New York Maternity Hospital, New York City. Illustrated with forty-one photographic plates. Published by The F. A. Davis Company, 1916 Cherry St., Philadelphia.

To-day, the authors state, the major part of obstetric practice is founded on *fact*. The general practitioner, amidst the activities of his calling, when in search of information, wishes to secure it without the loss of time entailed in searching through a mass of theory and statistics. On such grounds the present work has been prepared. It aims at being a guide to practice. It is clinical in its teaching. Anatomical and embryological and pathological data are inserted only when essential.

It appears upon close examination of the text that these aims of the authors have been very well carried out. The work is essentially practical, containing a concise description of normal pregnancy and normal labor untrammelled of theoretical or statistical discussions. Herein it will prove of special usefulness to the student and young practitioner. The half-tone photographic plates are original and very good, though some of them, it seems to us, are unnecessary. With the volume on "Obstetric Surgery," by the same authors, this book will constitute their *Practical Obstetrics*, which is thoroughly deserving of a high place in our obstetrical literature.

A HANDBOOK OF MEDICAL DIAGNOSIS. By James B. Herrick, M.D., Adjunct Professor of Medicine, Rush Medical College, Chicago. In one handsome 12mo volume of 429 pages, with 80 engravings and 2 colored plates. Cloth, $2.50. Lea Brothers & Co., Publishers, Philadelphia.

While it is stated that this handbook is intended especially for students, we think it will be found equally useful for practitioners. Very properly the author emphasizes the importance of a diagnosis as a prerequisite condition to intelligent treatment of a given case. The ability to make an accurate diagnosis is a matter of training and experience. The book of Dr. Herrick presents in a clear and concise manner the most important and conclusive features of diseases which must be considered in reaching a diagnosis. The work is divided, like usual works on Practice, into Infectious Diseases, Diseases of the Respiratory System, of the Circulatory System, of the Nervous System, Constitutional Diseases, etc., and all these diseases are discussed fully enough for all practical purposes.

Practitioners will find this a convenient and reliable working manual of medical diagnosis.

HOW TO EXAMINE FOR LIFE INSURANCE. By John M. Keating, M.D., late Medical Director of Penn Mutual Life Insurance Company; Ex-President of the Association of Life Insurance Medical Directors, etc. Third edition. Published by W. B. Saunders, 925 Walnut St., Philadelphia. Price $2.00.

Those who do much work in life insurance will often feel the need of such a book as this. Indeed, it is almost a necessity. The work of Dr. Keating has long enjoyed a popularity in this field, and for the medical examiner's purposes it certainly leaves little, if anything, to be desired. The first part of the book has to do especially with the applicant, discussing the methods of examination of lungs, heart, kidneys, etc., and the results of said examination in their relation to the quality of the "risk." Examiners will find in this part much to interest and instruct. The second part consists of "Instructions to Medical Examiners as Issued by Various Life Insurance Companies," which gives under each company the rulings of the home office on "risks" impaired from one cause or another. It gives us pleasure to recommend this book to every medical examiner.

MANUAL OF MEDICAL JURISPRUDENCE AND TOXICOLOGY. By Henry C. Chapman, M.D., Professor of Medical Jurisprudence in Jefferson Medical College, Philadelphia, etc. Second edition, revised. Published by W. B. Saunders, 925 Walnut St., Philadelphia. Price $1.50.

The author's experience as teacher of medical jurisprudence and as coronor's physician for the city of Philadelphia for a number of years enables him to place before the general practitioner a manual of medical jurisprudence and toxicology containing all the essential principles of these subjects without narrating illustrative cases. The manual is concise and well written, embracing all the subjects usually treated under these heads. The book contains fifty-five illustrations and three colored plates.

DIET IN SICKNESS AND IN HEALTH. By Mrs. Ernest Hart, formerly student of the Faculty of Medicine of Paris, and of the London School of Medicine for Women. With an introduction by Sir Henry Thompson, London. Published by W. B. Saunders, Philadelphia.

This book, comprising 215 pages, sets forth accurately and concisely the chemistry and physiology of dietetics.

Treats of the physiology and pathology of digestion, with illustrations. Gives also physiological indications for special dietary.

It is well termed by Sir Henry Thompson, "A handbook on food and feeding in health and disease," and supplies an important place in the literature of dietetics. W. J. B.

MISKEL. A novel. By L. M. Phillips, M.D., New York. Price, 50 cents. Published by Bailey & Fairchild Company, New York.

This is the second in the series of "Doctors' Stories" to be issued quarterly by this company. It is supposed to be of special interest to physicians from the important part which hypnotism, mental telepathy, etc., play in a very impossible plot. The author seems to possess some of the weird imagination of Rider Haggard without the latter's ability to write a story. Physicians will not find this medicated novel either interesting or edifying.

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ORIGINAL COMMUNICATIONS.

PRACTICAL PATHOLOGY OF THE MUCOUS MEMBRANE OF THE NOSE, THROAT, AND EARS OF INFANTS.

BY THOMAS F. RUMBOLD, M.D.,
ST. LOUIS, MO.

While the subject under consideration is the pathological condition of the mucous membrane of the nose, throat, and ears, yet as it is well known that when the inflammation of these organs becomes severe or is protracted, it implicates other organs—the eyes, the brain, the lungs, the stomach, or portions of the nervous system, consequently these secondarily affected parts must necessarily be alluded to in connection with the primary subject.

The value of the study of the pathological conditions of the mucous membrane of the nose, throat, and ears is conceded by all who have had even a short experience in the ailments of these organs. I fully believe that most of the advancement that is to be made in practice is to come through successful investigation in the line of pathology. This study is not to be confined to the consideration of the morbid phenomena merely, but as far as possible to be extended to the *essential* nature of the morbid actions themselves. It is along this line that investigation should be pushed. The facts thus gathered should be *utilized* as indications of the proper course and method of treatment. Of course the normal action of the part affected must always be borne in mind while studying its diseased action, for it is only by comparing the action of the part in its healthy and diseased states that a conclusion can be arrived at as to the degree of departure from health.

The Inflamed Mucous Membrane of Infants to the third year of age will be the subject considered in this article. The mucous membrane of the nasal passages is the tissue upon which the inflammation first shows itself—up to this time the infant has been *healthy in every respect*—consequently the actual condition of this tissue will first be described.

The manifestations of disease consist in an increased flow of apparently normal mucus, and a slight increase of the color of the mucous membrane, soon followed by its becoming more or less thickened. From this stage the morbid processes are characterized by conditions that are apparently very diverse. Sometimes the papillæ of the mucous membrane of the anterior portion of the inferior turbinates are temporarily enlarged, producing an irregularity of surface. The irregularity is due to swollen submucous glands, and positively indicates a subsidence of a severe inflammation that has implicated the whole of the passages.

Sometimes, but rarely, there is, even at this age, an atrophy of the mucous membrane, but this condition is always preceded by comparatively long-continued as well as excessive engorgement of the blood-vessels, the atrophy being due to a greatly diminished blood-flow in the part, a circulation that is not sufficient to maintain even the normal nutrition of the part, much less its former swollen condition. I doubt very much that this atrophy is permanent. Even without treatment recovery has frequently been observed to take place.

Hyperemia, then, is the first objective symptom of this disease, and is occasioned by a dilation of the blood-vessels as a result of paresis of the sympathetic nerves connected with them. The mechanism of this condition is briefly as follows: While mucous membrane is the first to show objective symptoms, the sensory nerves of the integumentary surface of the body, especially that of the head, face, neck, and hands, is the first part irritated by the cold. These sensory nerves, which are afferent in their action, transfer this *irritation* inward to the cervical sympathetic ganglia, which in turn reflect the *irritation* outward through their efferent nerves to the mucous membrane. It is thus seen that the sensory nerves first receive the irritation: They do not show it, but transfer the injury received to the sympathetic nerves, which do manifest it on the mucous membrane. It follows that if one will take care to guard the sensory nerves from irritation, the sympathetic nerves will remain in a healthy condition, for these nerves cannot be diseased unless injured through the sensory nerves. Thus pathology teaches a most valuable lesson in *hygiene*. If the infant takes cold from the irritation occasioned by inspiration of a cold draught of air into its nostrils, then the sensory nerves of this surface play the same part that was performed by those of the integumentary surface, resulting in a swollen condition of the mucosa of the part. The swelling is due to the increased diameter of every blood-vessel, and this condition is, as already stated, a result of a paretic condition of the muscular coat of the blood-vessels. This phenomena in total is called inflammation.*

Growths. This condition is followed by an apparent retardation of the blood-flow. The effect of this retardation is still greater dilation of the blood-vessels and capillaries, so that much more blood is retained than is required. With this excess of retention of blood, enlargements or growths *always do and must take place*, simply because of the presence of this nutritive fluid, the blood. Excess of blood always produces excess of growths. The size of the enlargements or growths will vary according to the age of the inflammatory action, and according to the condition of the mucous membrane affected, that is, whether it has or has not previously been slightly or greatly inflamed. In the infant these changes are not very manifest, as it has not lived long enough to allow the excess of blood-supply to produce growths of great size

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*I stated in my private lectures on Rhinology to physicians in the fall of 1873, that "A cold was due to a diseased condition of the sympathetic nerves." (See page 718, Treatise on Catarrhal Diseases of the Nose, Throat and Ears.—Rumbold, 1888.) I arrived at this conclusion from the study of the histological anatomy, physiology, and pathology of these organs, and from observations made in practice, almost entirely limited to the diseases affecting these organs, during the previous eleven years. Most of the facts from which I draw this inference are clearly stated in Todd and Bowman's Physiological Anatomy, 1855, but they are not placed in such relation, the one to the other, as to show the important fact that the paresis of the sympathetic nerves and consequent inflammation of mucous membrane is occasioned by limitation of the sensory nerves of the surface of the body.

The most manifest change of the mucous membrane of the infant is the enlargement of the blood-vessels; this is sufficient to allow the transudation of serum. The serum transudes mainly from the capillaries and small veins, but also from the small arteries. This serum differs from blood-serum in being of lower specific gravity, because it contains more water. The greater the distention of the blood-vessels, the more nearly does this serum resemble blood-serum and the greater is the amount of albumin which it contains. If the pressure on the walls of the blood-vessels be great, as in severe acute inflammation, the serum may yield a fibrinous coagulum. When inflammation of this severity occurs in the Eustachian tubes and fibrin is thrown out, it closes the tubes, and then very serious ear trouble is sure to follow, frequently resulting in deafness or deaf-muteness or death. The latter two results are only averted by paracentesis of the membrane tympani, or by its rupture occasioned by ulceration.

The plexus of vessels, that is so plainly seen in the adult turbinates, on dissection, is not seen in the infant. In a few heads that I have examined, that were nearly three years old, the blood-vessels were beginning to form plexuses. It is easy to distinguish the arteries from the veins even in the third year of age, and even when the plexus of the vessels is partially formed. This condition of the blood-vessels and mucous membrane is also seen in the nasal passages of the healthy dog, sheep, hog, goat, cat, mouse, rat, rabbit, squirrel, cow, horse, etc., tending to show that the enlarged condition of the blood-vessels, that is, in the form of plexuses, is not the normal condition.

Edema. When the lymphatics are insufficient to remove the transuded serum by absorption, edema is the result. The passage of the serum occurs without rupture of the walls of the blood-vessels, and even blood corpuscles may pass through the coat of the capillaries by escaping through the stomata, which Becklinhauses has shown to exist between the endothelial elements.

The Throat. If in the nasal passages the edema is so great that the infant cannot breathe through the nose, respiration must of necessity be carried on through the mouth. This will soon cause dryness of the fauces. This condition invites extension of the edema to these parts, as well as occasions ear-trouble, for the dryness will induce frequent acts of deglutition. The action of the soft palate during deglutition, the nasal passages being full of muco-purulent secretion, will force some of the secretion up to the Eustachian tubes, to the positive injury of the middle ears and their contents. The edema of the throat is shown by the narrowing of the fauces as well as by partial enlargement of the tonsils.

Mouth-Breathing. This is the age of the commencement of what is called "the mouth-breathing habit." It is seen from what has been said that this symptom is a *consequence*, and not a cause, of nasal inflammation. Here the relative positions of cause and effect are exceedingly important. Give the patient normal breathing room through both nasal cavities, and mouth-breathing will be discontinued in a short time. It is an unnatural process, and always acquired from necessity. Until this is done, it is foolish to say "shut your mouth and save your life," unless the user of this term means to say, "free your nasal passage of chronic inflammation, its growth and other sequences," so that you can "close your mouth and save your life; that would most certainly be consistent with facts. If the nasal inflammation is so severe as to interfere with the nutrition of the bones of the face, the child will acquire a peculiar physiognomy, due to the arrest of the development of these bones, the open-mouth breathing aggravating the peculiarity. I have works on my shelves that say this peculiar facial expression is due to mouth-breathing, which is a very serious mistake, as it obscures the indications for its proper, and it may be its successful, treatment.

Aphasia. Fortunately it is quite rare that nasal inflammation is so excessively severe as to extend into the brain so as to cause a disability of speech. The disability may be only a slowness in learning to speak, or slovenly way of pronouncing words, or the disability may be so great that there may be a total inability to pronounce one word that could be understood by any one save the mother. The subject may never learn to pronounce one word; making himself intelligible only by peculiar inflections of high or low tones, and by laughing and crying. With this disability there is nearly always an atrophy of the bones of the face and mouth-breathing. I have had, since 1871, seven such cases, from seven to twelve years of age—that is, with total inability to speak one intelligible word. It was not the least difficult in each of the cases to trace back to the time when the nasal inflammation, during infancy, was doing its mischief; the nasal disease in all of these cases was distinctly remembered by the parents.

That the nasal inflammation extended, in these cases, to the third convolution of the brain and the island of Reil—the center of speech—was evident upon close and careful investigation of each case. The auditory nerves were somewhat affected in all the cases, but hearing was not very dull, for all the patients could hear the usual voice at the distance of from two to four feet when their backs were turned to the speakers, and five of them gave abundant evidence of their ability to understand what was said to them. There was evidence of defective hearing in infancy, in the marked projection of the pinna of the ears. The sight on casual examination was perfect. The facial nerves were unaffected as far as could be ascertained by common tests. The sensory nerves were nearly normal, but all of the patients had locomotor ataxy to a greater or less degree. Some could not walk at all with a handkerchief over their eyes. Others staggered so that they fell when pushed into a walk. Not one of them would willingly take a single step with a handkerchief thrown over the head so as to cover the eyes. The absence of the ability to speak under these circumstances clearly points to the brain as the organ injuriously affected, and as each one has been in *perfect health* since their recovery from the severe illness that affected their nasal passages, it shows that the nasal inflammation had extended its injurious influence to the third frontal convolution and the island of Reil.

The Ears. Up to the third year of age the abnormal nasal secretion has at first but little pus in it. The injury that the secretion does is by the excessive quantity that is formed, and because of its fluidity. The quantity is so great that the pharyngo-nasal cavity is sometimes completely filled with it, so that as the air goes up into the Eustachian tubes, the secretion also is drawn with it into the middle ear. This condition shortly—in a few hours at most—creates so much distress as soon to bring about serious ear-symptoms, causing acute tympanitis and myringitis, and unless perforation of the membrane tympani takes place, serious brain symptoms will soon follow, which may last but three or four days before death takes place. In fatal cases pneumonia frequently assists in taking life, the nasal secretion being full of pneumococci.

I have made but few post mortem examinations of infant's heads, but before making these I had predicted in each case serious ear complications, for the reason that I saw purulent secretion flowing from the nostrils, and because the infants had strabismus and nystagmus before they died, and the prediction was verified. Serious disease of the brain was also discovered in each case. In not one of the infants was there the least otorrhea, nor was there any redness or swelling about the outer ear, yet a greenish pus was found in each affected middle ear. It is plainly seen that in each of these cases death was occasioned by an excessive quantity of fluid secretion in the pharyngo-nasal cavity. That this condition is not very uncommon will be inferred from the following quotations: Troeltsch says, in his work on "Diseases of the Ear in Children," page 39, that an investigator examined ears of only new-born children—twenty-four in all—the oldest age twenty-five days, "and found the tympanum empty in six, while in eighteen the cavity contained fluid, and in four of the eighteen the fluid was true pus." Troeltsch himself, without knowing this, examined "forty-seven petrous bones taken from twenty-four *unselected* children." Of the forty-seven ears he found only *eighteen that were normal;* the other *twenty-nine* showed various degrees of diseased action, rarely of a mucous character, mostly masses of purulent matter. "The drum membrane was never perforated, . . venous hyperæmia and congestion of the brain were always present when that part was examined." Another investigator found in *eighty* ears only *fourteen that* *were normal*, the other *sixty-six* abnormal. Another investigator: "From about *two hundred and thirty* accurately described cases, the tympanic cavity was normal in only thirty." I may be mistaken, but I think that every one of these children's ears was affected through the Eustachian tube, and that from disease of the pharyngo-nasal cavity, and this again from nasal disease occasioned by colds.

The frequency of the coincidence of sudden attack of serious ear-disease and pneumonia suggests a relation of the one to the other, and I believe that the fact that nasal secretion of a person who has a severe cold in the head has pneumococci in it shows this relation and demonstrates the origin of the pneumonia. Of course the cold and the ear-disease prepared the system so that inflammation of the lungs more readily took place. I know a physician who said he always gave rabbits pneumonia when he gave them a hopodermic injection with his saliva. I remarked to him: "You may have had a cold in your head at the time; if so, your saliva, more than likely, had pneumococci in it, as every slide with this kind of saliva in it that I have examined since 1888 had this kind of bacteria in it." The nasal secretion, during a cold in the head, is frequently drawn down the pharyngo-nasal cavity, and then into the mouth and spat out. At these times the saliva is sure to be impregnated with the various kinds of bacteria that are found in the nasal cavities. Every injection of this kind of saliva will give a rabbit pneumonia; but, according to my experience, injections of saliva of persons who have *no* colds in the head will *not* cause a pneumonia in the rabbit. I admit that my experience in this respect is limited. I have made but about twenty hypodermic injections of saliva of healthy persons, and most of the injections were made into four rabbits. In one rabbit I made seven injections of saliva of seven different healthy persons. After this I made an injectian of saliva from a person who was suffering from a severe cold, and killed the rabbit, it dying of pneumonia. To speak with positiveness on this matter one should make a large number of carefully noted injections of both kinds of saliva.

Deaf-Mutism. This is the age of the little sufferer when the disease of the ears will transform him into a *deaf-mute*. The inflammation of the middle ear, originating from the irritating effect of the secretion that passed up the Eustachian tubes, has been severe enough to cause the escape of serum that is fibrinous; this has filled the tympanum as well as caused ankylosis of the ossicula auditus. The inflammation must also have been severe enough to have extended into the external ear and so injured the auditory nerve as to render it useless.

It is evident to every medical man that severe inflammation, such as above briefly described, *must* produce other deranging effects in the infant's organism. Some symptoms that are purely secondary to nasal disease, are named as symptoms of another disease by physicians who have given but little attention to mucositic inflammation of the nasal passages. One of the most common things is to see an infant that has been suffering for some weeks from nasal inflammation, treated for malarial fever, and as the remedies that are beneficial in malarial fever are also relieving to an advanced nasal inflammation, the recovery is taken as proof of the correctness of the diagnosis. But a close examination of the most prominent symptoms of the two diseases will show that there is a marked difference.

In cases with symptoms resembling those of malarial fever, but due to nasal inflammation, there is not engorgement of the spleen nor enlargement of the liver, as is found in about ninety per cent. of malarial cases. In nasal cases the brain and spinal cord show marked indications of diseased action; not so in malarial cases. In nasal cases there are no regular paroxysms due to exposure, while in malarial fever paroxysms are regular. In marial fever, during the period of incubation, there are no symptoms, the patient appearing in *perfect* health; in nasal cases, there is *no time* in which the patient is not under the debilitating influence of nasal inflammation. In nasal disease, on a bright, clear day the patient is improved in health; with the malarial case, a bright, clear day does not check his paroxysms.

If a nasal case has more dangerous symptoms than those usually seen in malarial cases, the complaint—according to what I have seen in several instances—is called typho-malarial, or typhoid, or infantile remittent fever; but here again we have distinguishing features that will indicate the true nature of the case: (a) The fact of the secretion being seen in the nasal passages, but not seen in typhoid. (b) Intestinal symptoms, other than hemorrhage, are absent in nasal cases, but not in typhoid. (c) Bronchitis is present in nasal cases, but not in typhoid. (d) Nervous symptoms are marked and constantly present in nasal cases, but not in typhoid. (e) Intestinal hemorrhage is common in typhoid, but not in nasal cases. (f) In typhoid the temperature has more of a remittent type than in nasal cases. (g) In typhoid the infant's recovery may take place in one night; in a nasal case such rapid recovery does not take place.

It is very urgent that this subject should be more carefully and thoroughly investigated than it has been up to the present time. Until we are allowed to make more post mortem examinations, not of the poverty-stricken that flock to the clinics, but of the infants that die among the well-to-do classes, until this has been done for from five to ten years, children will necessarily be under the care of those who *guess* that maybe this, or maybe that, will be good for them when their nasal passages and ears are seriously affected.

THE AFTER-TREATMENT OF TRACHEOTOMY CASES FOR MEMBRANOUS CROUP, WITH AN OBSERVATION OF THREE SUCCESSFUL, OUT OF FOUR OPERATIONS.*

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It might be proper to preface my remarks on the after-treatment of tracheotomy cases for croup with a brief discussion of the etiology, symptoms, diagnosis, and the medicinal treatment of membranous and diphtheritic croup.

The most recent text-books have ceased to give space to membranous croup as a disease distinct from diphtheria. While it is safe to regard membranous and diphtheritic croup as the same disease in densely populated districts, yet I believe there are many cases of membranous croup in isolated localities where diphtheria or other infectious diseases are practically unknown.

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* Read before the Georgia State Medical Association, Augusta, Ga., April 16, 1896.

My first case of tracheotomy for croup was in a country district, in a family where there were five other children, who were all healthy at the time, and no sickness of any kind was observed either six months before or after the time of the operation, and no attempts at isolation were made.

The incubative period of diphtheria varies from one to twenty days. My classmate, Dr. J. S. Stribling, of Seneca, S. C., writes me that he was called to see a child, suffering with diphtheria, at 5 A.M., and in attempting to detach a portion of membrane from the tonsil, some sputa was projected into his face and mouth. At 3 P.M. he was taken with a severe chill, and all the constitutional symptoms of diphtheria; thus making the incubative period ten hours. He had the diphtheritic sequela and recovered sufficiently to return to his practice only after twelve months.

The grandmother of the child upon whom tracheotomy (my fourth case) was performed for diphtheritic croup came from the country to visit the grandchild, with her own three-year-old child, on the fourth day after the operation. Six days later the child was taken with coryza, sore throat, swollen glands in the neck, erythematous rash over the back, etc., and returned to its home the next day. The second day after its return the child died with croup; thus making the incubative period about six days.

There are two forms of diphtheria. First, the pseudo-membranous inflammations, due to the Klebs-Loeffler bacilli; and, second, the varieties of diphtheria due to a streptococcus.

The Klebs-Loeffler bacilli are found only at the site of infection, and the systemic effects are due to the absorption of toxalbumen or poisonous products of the bacilli. While bacteriological examinations will do much towards clearing up the diagnosis, yet there are many cases where the bacilli cannot be found, and we are forced to depend on the clinical symptoms to make a diagnosis.

From a clinical point of view, membranous croup occurs in children from two to five years old, being rare in young infants, and usually occurs in isolated cases, and is not contagious. It is gradual in development and slightly paroxysmal in character and occurs without either pre-existing pharyngeal symptoms, constitutional depression, or glandular involvement, and has no sequela.

Diphtheria, on the other hand, begins in the pharynx, and, in the majority of cases, does not extend to the larynx, and has the constitutional symptoms of an infectious disease. It occurs along with other cases, and is contagious. Albuminuria is diagnostic of diphtheria. The Klebs-Loeffler bacillus, when found, makes the diagnosis positive.

The medical treatment includes a great variety of drugs which should be tried, if possible, before resorting to surgical treatment. The remedies that have been recommended for croup are too numerous to mention, and I will only speak of a few that I have found to give temporary relief. Calomel by sublimation may be used, and fifteen grains every two hours is the quantity usually employed. Vaporized inhalations of lime water and turpentine along with cold or hot applications to the neck may also be tried. Turpeth mineral occasionally gives relief.

It is very exceptional for a case of membranous laryngitis to recover from medicinal treatment alone, and we are driven to the consideration of the surgical treatment.

Opinions differ as to the relative value of intubation and tracheotomy, but the percentage of recoveries from statistics is about the same in both instances, being slightly in favor of intubation. From a collection of twenty-one hundred and eighty-three cases of tracheotomy by Lovett and Munroe, twenty-eight per cent. of recoveries is given, and from a collection of forty-two hundred and seventeen cases of intubation from all sources, about thirty per cent. of recoveries is reported. The statistics are misleading in that many mild cases are intubated, whereas tracheotomy is done only as a last resort. The only advantage that I can see that intubation has over tracheotomy is, that the parents assent to its use early in the disease and the case can finally be submitted to tracheotomy. The great desideratum in both operations is to admit air into the lungs and to free the trachea and the bronchi of the retained sputa. Intubation is by far inferior to tracheotomy in fulfilling the latter indication, and the prospects for recovery can be estimated by the amount of expectoration.

After having given medicinal treatment a fair trial and the dyspnea progressively gets worse with beginning cyanosis, resort immediately to tracheotomy, for the exceptional cases that recover without operative interference at this stage of the disease are not to be considered. In a majority of cases a sufficient time is had to give the various remedies a fair trial.

Where laryngeal obstruction is rapidly developed, the formation of membrane in the trachea, with an extension upwards, is probable, and this class of cases is not so amenable to tracheotomy.

The instruments needed are not numerous, and only a silver tube in addition to the general operating instruments is required.

An anesthetic should be used very cautiously, and chloroform is preferred, as quietude of the patient is absolutely essential to a rapid operation. A child with croup makes a very rebellious patient when in the last stages of the disease.

The superior is preferable to the inferior operation, as the trachea is more easily exposed in the former. The ring of the cricoid cartilage is the guide, and from this point an incision should be made downwards, two and a half inches long, the larynx being steadied with a tenaculum.

A long incision makes the operation more easy to expose the trachea, and this is one of the most important details of the procedure. Dissection should be made with the point, or the handle of the scalpel pushing aside any vessels that may appear and the lobes of the thyroid gland.

The trachea may be opened from below upwards with a small scalpel resting on the palmar surface of the right index finger, which serves as a guide. The slit may be hooked up with an aneurism needle and the tube is introduced.

If the skin incision has been very extensive it may be sutured with silk and the tube must be secured by tapes around the neck. A feather should be dipped in lime-water and introduced into the tube to stimulate cough and expectoration.

The after-treatment is the most important part of the whole procedure, and I attribute the favorable results of my cases almost entirely to this part of the treatment.

The essential part of the after-treatment was the persistent use of lime-water and maintaining the room temperature at sixty degrees to seventy degrees F. The feathers used should be of proper size and stiffness, and should be soaked in bichloride solution before using them. The tube should be moistened every few seconds, night and day, by dipping the feather in lime-water, thus allowing it to trickle down the tube. I believe lime-water to be an excellent solvent, and, if used too freely, it is only coughed out, making the expulsion of shreds of membrane and tenacious mucus more easy. The nurse can be directed to use it to the extent of producing a bubbling sound in the tube nearly all the time, and occasionally introduce the feather down into the windpipe to stimulate cough. When the excess of lime-water is coughed up, some of it is projected along the sides of the tube to the vocal cords, thus effecting disintegration of the membrane. This part of the treatment can be done continuously without disturbing the patient, and almost any nurse can very soon learn the indications to be met, and should be ever ready to remove the sputa when once coughed up, to prevent its being drawn back through the tube. Vaporized solutions for inhalation fulfill a good indication, but the apparatus necessary are usually inconvenient to be had outside the hospitals.

The inner tube should be removed every few hours and washed in a soda solution. Iodoform ointment should be applied every day to the edges of the wound, as the dried sputa forms such hard crusts that it annoys the patient. The chest should be rubbed with camphorated oil and enveloped in flannel every day. Whisky should be given as eggnog, milk punch, or toddy, but if patient refuses, it should be given per rectum when necessary.

A liquid diet, including milk, broth, coffee, etc., should be given freely.

As the case advances expectoration becomes more liquid and easy, so that about the tenth day the sputum has lost its purulent qualities and the tube may now be permanently removed.

After the fourth day the whole tube should be removed and washed and a moist pad applied to the wound so as to encourage breathing through the larynx. Tracheotomy keeps the patient alive until the membrane is disintegrated by the lime water and furnishes a means of expectorating the débris.

The causes of death after tracheotomy are septicemia, diphtheritic poison, heart clot, and diphtheritic paralysis.

The patient who survives the end of the third day will probably get well.

After the removal of the tube the edges of the wound should be kept in apposition with adhesive plaster applied in the following manner: Make two rolls of cloth about one-sixth of an inch in diameter and one inch long and place them on either side of the wound. Over these the plaster is applied every day for the first two or three days. The advantage of this is, the bottom edges of the wound are first approximated and the opening heals up usually in five to seven days, and voice returns to normal in about two weeks.

I have four cases to report, three of which recovered, and in all the operation was done as a last resort; so the favorable results cannot be attributed to early operations.

I regret that I have not the bacteriological examinations of the cases to report, and consequently only clinical diagnoses were made. In none of the cases were there the characteristic diphtheritic membranous deposits observed in the pharynx, or on the tonsils. Two of the cases were diagnosed diphtheritic, and the two remaining cases were non-diphtheritic. In both of the latter the result was favorable.

CASE 1. E. H., a healthy, four-year-old girl, living in the country, suffered with croup three days. The dyspnea had gradually developed, and at the time of the operation the patient was cyanotic and in a semi-comatose condition, with a pulse of one hundred and sixty. The diagnosis of membranous croup was made. After having tried all the remedies that could be thought of without any success, tracheotomy was done, September 23, 1891, at 6 P. M. Expectoration was abundant, and the child made a good recovery, and has been well ever since.

CASE 2. C. D., a boy three years and two months old, was taken with hoarseness four days previous to the time I saw him and had developed aphonia with excessive dyspnea. Membranous croup was diagnosed and tracheotomy was done as a last resort, January 9, 1893, at 4 P. M. For the first twenty-four hours expectoration was scanty and temperature rose to one hundred and four degrees F., but by the persistent use of lime-water expectoration became more loose, and the fever was reduced. The patient made a good recovery and has been well ever since.

CASE 3. E. H., a delicate and nervous boy, seven years old, was taken with hoarseness March 8, 1893, at 8 A. M. Dyspnea suddenly developed at 3 P. M., with marked cyanosis, and pulse was reduced to forty, and was barely perceptible. Diphtheritic croup was diagnosed, as a younger brother died a few days previous with diphtheria, complicated by pneumonia. The patient reacted very slightly and tracheotomy was very hurriedly done with very unfavorable surroundings. Expectoration was absent and dyspnea was only partially relieved on account of the formation of the membrane in the trachea. The patient died thirty hours later in a convulsion.

CASE 4. R. G., a two-and-a-half-year-old boy was taken with hoarseness and croup, December 2, 1895, at 9 P. M. I was called to see the child with Dr. D. H. Ramsaur, December 6, at 1 P. M. The diagnosis of diphtheritic croup was made and dyspnea was now extreme. All the various remedies were tried with no success and at 4 P. M. tracheotomy was resorted to in the presence of Drs. Ramsaur and Wynn. The patient reacted well and expectorated freely, by using the lime-water as previously indicated. I might mention incidentally that the patient vomited a worm six inches long on the third day after the operation. The tube was removed on the eleventh day and recovery was complete.

Conclusions:

First. Croup, whether diphtheritic or membranous, is almost invariably fatal without surgical treatment, and the few cases that recover by medicinal treatment alone are not to be considered.

Second. So far as the practical indications for tracheotomy are concerned, it makes no difference whether the croup be diphtheritic or membranous.

Third. Tracheotomy has the advantage over intubation, in that it gives a better means of expectorating the membranes and furnishes free drainage from the sight of septic infection.

Fourth. Tracheotomy is a justifiable surgical precedure, and should be performed in all cases where our therapeutic resources have been exhausted and where the patient is in imminent danger of suffocation.

It should be done in hopeless cases, since it either offers a chance for the patient or promotes euthanasia.

Fifth. Tracheotomy keeps the patient alive until the pseudomembrane disintegrates and resolves into a muco-purulent liquid and is expectorated through the tube.

Sixth. The after-treatment is the most important part of the procedure, and I attribute the successful results reported to the persistent use of lime-water as previously outlined.

PERSONAL AND SURGICAL REMINISCENCES OF THE WAR.*

BY J. McFADDEN GASTON, M.D.,

ATLANTA, GA.

I was among the first to enter Fort Sumter for the relief of United States soldiers injured in firing a salute before withdrawing from the fort.

I accompanied General Bonham with staff to Richmond and was afterwards at Manassas Junction. Was assigned by General Beauregard as medical director at Manassas. Was called to the advanced post at Fairfax Court House to relieve injuries received in a skirmish with the enemy, and dressed wounds of General Ewell in the shoulder.

I superintended all the preparations for the battle of Manassas, organizing hospitals and appointing medical officers.

Visited battlefields immediately after battle under General Johnston's orders and relieved wounds of both Confederate and of the enemy in like manner.

An interesting incident came under my observation, which has not been reported so far as I know, in finding Lieutenant Blackford with forty prisoners with arms still in hand and a large four-horse army wagon in his train. Upon applying to me for advice, he was urged to have his prisoners stack arms in the wagon, and to form in line two and two, which he did.

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*Abstract of the Orator's Address before the Survivors' Association of Ex-Confederate Surgeons, at Spartanburg, S. C., April 22, 1896.

At my hospital headquarters on the field, a young man, or rather a boy of sixteen, with a large grape-shot in his thigh, very archly asked if he might go back to the field after it was removed.

A case of ligation of the artery of the leg with silver wire occurred in the person of Lieutenant Richardson.

During the afternoon and night following the battle, a large number of surgeons were engaged in operating upon the wounded, and doubtless many amputations were done, which, with farther experience in the war, would not have been considered necessary.

Having half a basketful of legs and arms, I encountered difficulty in getting some one to bury them, and, at last, had to get a negro to dig a hole and bury them.

On the day after the battle, when wounded soldiers were being transported, it was found that Lieutenant De Pass had received a fracture of the skull and required trephining, which was done aboard of the car.

Temporary accommodation of a large number of wounded was secured at Orange Court House, and I proceeded to that point to superintend the further treatment of the wounded.

I recall the fact of seven bullet-holes in a young man, one of which was from a minie-ball imbedded in the clavicle so near the artery that I declined to remove it at that time, and decided to wait until less danger would attend its removal at a later period.

While I was still at Orange Court House Dr. Williams, Dr. Johnston's chief surgeon, returned to Manassas, and sent an order to me to report for duty as surgeon of a Louisiana regiment which was without a surgeon.

Ignoring his authority, I reported to General Beauregard, stating that I was averse to serving as surgeon for the Louisiana regiment, and requesting to be assigned to the South Carolina forces, when I was made brigade surgeon of D. R. Jones, and continued with this brigade under General R. H. Anderson, and was made chief surgeon of his division when General Anderson became major-general.

In the battle of Seven Pines, when going to learn the suitable position from General Anderson for a hospital, I was exposed to the direct fire of the enemy, and beat a hasty retreat.

It was in this action that my two brothers were slain, and I went out at daylight to recover their bodies directly in front of the enemies' lines.

It was in this action that Dr. E. S. Gaillard, on the staff of General Johnston, lost his arm. He afterwards always wrote with his left hand, and was editor and founder of *Gaillard's Medical Journal.*

It often happened that until the opening of a battle, it could not be determined where the battle would take place. This was exemplified in the case of Dr. Post, at the battle of Williamsport, who received a wound of a minie-ball which traversed the top of his head without entering his skull.

After placing him in an ambulance, the rest of the surgeons and myself fell back to a less exposed position. While Dr. A. W. Thompson and myself were riding back, we were overtaken by a shower of bullets, and Dr. Thompson stopped, dismounted, and placed his horse between him and the enemy, but I considered that distance was the best thing to put between me and the firing, and decided to ride on, and the doctor soon came to the same decision.

General Anderson's brother, Captain E. M. Anderson, was killed during this fighting, while near our hospital headquarters, so that it was a timely retreat on our part.

It was here that Dr. W. Moffat Grier, D.D., President of Erskine College at Due West, in this State, and a man now famous in his church, was wounded, and that his leg was amputated by me, doing a circular operation above the ankle.

A very extraordinary lacerated wound was received by a fragment of shell which struck the buttock in the person of Mr. Bratton. A portion of the shell was imbedded in the bottom of this extensive wound, and an opening had been made sufficient to admit one's fist. There was comparatively little shock, and but a small amount of blood lost. The wound was simply approximated with lint and bandage, and left with the direction to use water dressings. I did not see or hear anything more of this patient until about six months ago he presented himself in my office and recounted the interesting circumstances.

Another interesting case that came under my observation at this battle was that of a minie-ball driven into the skull, the base of the ball being imbedded in bone itself, so that it was on a level with the outer surface of the skull. A process was resorted to which has not attracted general attention in surgery, by placing the trephine crown around the base of the ball and cutting out a rim of bone in which it was imbedded, and thus removing the bone with the ball. The cerebral symptoms were removed for the time, but I know nothing of the subsequent history of the case.

In the course of events it was thought proper by the military authorities at Richmond to organize a medical examining board for the examination of medical officers on duty with the different commands. As the different surgeons and assistant surgeons had been commissioned by the authorities, this order met with opposition and great disfavor. The South Carolina brigade, in which I was serving under Brigadier-General D. R. Jones, sent up a protest against its enforcement. Like opposition was manifested by medical officers in other commands. The authorities at Richmond disregarded these manifestations of disapproval on their part, and ordered the examinations to be made.

Having taken an active part in formulating this protest against the examination, I tendered my resignation of my commission as surgeon, advising the other surgeons in the same brigade to accept the conditions and submit to the examination.

My resignation was promptly accepted by the secretary of war, and I was relieved of further duty with the brigade. As I then occupied an independent position, I considered that the government had the right to require any condition for the appointment of surgeons, and made application for a position as surgeon in the Confederate States Army, with the understanding that I would acquiesce in the requirement. This application was acted upon favorably by the secretary of war, and I was directed to present myself for the examination before the board in Richmond. After a formal examination I was approved and reported upon favorably and assigned to duty with D. R. Jones's command, and commissioned under date of original entrance in the service.

The most trying ordeals for the Confederate surgeons were in the seven days battle around Richmond, when they were required to keep up with the movements of the forces and to change their field hospitals from day to day, and underwent more wear and tear than in any other service.

At the battle of Malvern Hill it devolved upon me to perform a high amputation of the thigh in the case of a Federal colonel, the ball shattering the femur. This was satisfactorily performed, but the patient died subsequently of shock.

After withdrawal of the troops from the line of the Chickahominy an order was received from Dr. L. Guild, medical director of the army, to organize a division hospital. I proceeded at once to make requisition for all that was necessary, but was informed that the articles could not be supplied.

Soon after this a patient was recommended by the division board to be sent to Richmond, as they did not have proper facilities for treating him in camp. Upon being submitted to.Dr. L. Guild, he indorsed upon the application the remark that this was a proper case for the division hospital. In reply, without due regard to his being higher in authority, I stated that I was surprised that he should suppose that we had a division hospital. He never forgave me this offense, and took occasion subsequently to make me feel that he recollected it.

On one occasion, on the march when returning from Gettysburg, he thought that he had detected that I had been guilty of failure to perform my duty, and took occasion to reprimand me through official orders. I drew General Anderson's attention to this. He asked me if I could make a satisfactory explanation of my conduct. I stated that I could, and did so. Upon this statement General Anderson said that "It seems that the medical director of the army is more disposed to take exception to the chief surgeon of my division than to ascertain the wants of the service, or than he is to adopt measures for their relief."

In this connection I may say that after the battle of Gettysburg Dr. Guild called me to account for leaving my sick and wounded within the enemy's lines. I had selected the college building for our hospital when this building was still in the possession of our forces and in our lines, and sent provisions and nurses and hospital facilities to them when the hospital was out of our lines.

I told Dr. Guild that I had no means of knowing that this position would be abandoned by General Lee, and that my sick and wounded were better provided for than any other portion of the army, as all the hospitals with sick and wounded were now to be left in the hands of the enemy. In a conversation in regard to the administration of the work I had done, Dr. Powell, A. P. Hill's corps surgeon, who was my ranking officer, stated that he had observed on frequent occasions Dr. Guild's criticism upon my performance of duty when he found nothing exceptionable, and he could not understand why this should be until he was informed of this occurrence relating to a division hospital.

Realizing that the antagonism of the medical director might finally get me into trouble, as I might not at all times be free from cause for censure, I notified General Anderson of my desire to avail myself of the first opportunity to be transferred to some other branch of the service. Such an occasion was presented in my being ordered by the surgeon-general when I was absent in South Carolina on sick leave, to go to the relief of the medical department after the battle of Chickamauga. Dr. S. H. Stout, Medical Director of Hospitals, expressed a wish to have me assigned as medical inspector of hospitals in his department, and made an application accordingly.

Upon my return to the division I sent up an application requesting that I be relieved of my duty with General Anderson's division, and be assigned to hospital duty, with the expectation that this understanding would be carried out.

But upon receiving the order for my relief from duty with General Anderson's division, I was directed to report for orders to General Beauregard at Charleston.

But upon doing so, I was instructed by his medical director to proceed to Fort Gaines, Ga., and to organize a general hospital, in view of a probable invasion from Florida by way of the sea. It turned out that the apprehension was unfounded, and hence no patients ever came from that direction.

One of the most pleasing features of my separation with General Anderson and his division was the receipt of the following communication:

HEADQUARTERS ANDERSON'S DIVISION, December 12, 1863.

Surgeon J. McF. Gaston, formerly Chief Surgeon Anderson's Division:

SIR:—We, the senior surgeons of brigades of your old division, did not fully realize your transfer from the field until we had read your very kind note of the 9th instant.

We all regret that we did not have the pleasure of shaking you by the hand, and bidding you God-speed ere you left us. It is hardly necessary to tell you that we regret the change beyond the capacity of language to express, for that you had won our high esteem and possessed our confidence must have been even to you apparent. Upon the battle-field, without your counsel and generous co-operation, our arrangements will seem incomplete. You will be missed as the courteous presiding officer of the Board as well as the genial gentleman and friend.

We rejoice that our efforts to discharge our duties have met your commendation; to continue efficient and faithful we consider, without compliment, that we have but to emulate your high example.

In your new field, Doctor, we wish you all success, and predict a happy and an honored future, such a one as eminent capacity and lofty moral standard alone can win.

We remain with very high respect,

Your friends,
M. L. CROFT,
Senior Surgeon Pose's Brigade.
W. TAYLOR,
Senior Surgeon Wilcox's (old) Brigade.
M. L. THOMAS,
Senior Surgeon Perry's Brigade.
ALF. W. POWELL,
Senior Surgeon Mahone's Brigade.
SAMPSON POPE,
Senior Surgeon Wright's Brigade.

The hospital under my charge at Fort Gaines became the recipient of the hospitals at Macon and other points, to which the wounded were sent from the operations around Atlanta.

I recall a wounded Federal prisoner who was sent back with a secondary trouble of the knee-joint from a bullet wound in that vicinity. The condition of this patient would have warranted an amputation of the leg above the knee, but I refrained from doing so, from the impression that it might be supposed that this extreme measure was resorted to because he was a prisoner.

He died and a somewhat extensive post-mortem examination was subsequently made, which well-nigh involved me in trouble at the close of the war. A Federal officer who was placed on duty at Fort Gaines investigated the facts and sought my whereabouts. But it so turned out that I was then in a foreign land, and no further investigation was made after my return.

After the advance of General Hood into Tennessee, I received orders to break up my hospital and to accompany his movements. But upon reaching Selma, Ala., I received orders to stop at that point, and from there was directed back to Fort Valley. The scope of the work there was very much such as it had been at Fort Gaines.

When the Federal commander, General Wilson, took possession of Macon, I took the responsibility of removing my hospital to Albany, so as to be out of harm's way.

With all the officials and attendants of the hospital, we stopped over at Smithville at the hour of dinner. Our stores were all nailed up and inaccessible, and nobody had any money with which to buy a meal at the hotel. I informed the proprietor of the hotel of our predicament, and offered to barter our spades, shovels, and pickaxes for a meal's victuals; and he acceded to this proposition. We all enjoyed a most substantial repast. I subsequently visited General Wilson at Macon, and reported that I had a hospital outfit with some utensils and stores at Albany.

After inquiry as to the character of the articles, he told me that I could retain them for distribution among the needy people of the country.

A lot of good, substantial clothing was sent to Dawson for deposit, and was left at the depot. Upon passing there subsequently I found that the squad of Federal soldiers stationed there had been taking liberties with these clothes, and I called them together and spoke to them peremptorily that, by the authority of General Wilson, they were commanded to leave these clothes unmolested. They were never troubled, and were distributed among the people.

In a conference with Dr. Frank Hawthorne, who had been in charge of a hospital in South Georgia, it was determined that the South no longer offered favorable conditions for a home, and that we would seek a refuge in Brazil, South America. It was planned that we would meet on a fixed day at New Orleans, each selecting his own route for reaching that point. As pecuniary resources were very limited, and I had to avail myself of a loan of two hundred dollars from a friend, I set about making all the necessary arrangements and, with a well-stocked mess-chest, boarded a steamer on the Chattahoochee, at Fort Gaines.

I was transferred from a river steamer to an ocean steamer at Appalachicola, and reached Mobile bay, where I was landed on the coast, and there awaited a steamer for New Orleans.

At the same point I was fortunate in meeting several Federal negro soldiers, who showed me a great spirit of accommodation in carrying my heavy mess-chest across a neck of land to reach the New Orleans steamer. Without their assistance it would have been utterly impossible to have secured any one to have moved this heavy mess-chest, and knowing, as they did, that I had been a Confederate officer, they rendered me service with alacrity, refusing compensation. With the delay, I reached New Orleans after the date fixed with Dr. Hawthorne, and found that he had gone on to New York.

I succeeded in getting free transportation on a vessel which was to transport troops from New Orleans to New York. It devolved upon me to furnish my own provisions, and my mess-chest was well supplied for this purpose, and was shared by another Confederate, Mr. Charles Mallory, whose resources were worse even than my own.

There were several cases of intermittents among the soldiers, and when it was learned that I was a physician they called upon me for advice. But when it became known that I proposed to give thirty grains of quinine and a half grain of morphine at one dose, immediately before the chill, it caused the officers to doubt my good faith in providing for the welfare of their troops. Upon my assurance that I had repeatedly given this dose with good results always, they submitted to it, and it was attended with complete relief in every case. A fracture of the leg, among the soldiers, occurred from sliding of the door of the hatchway, and crushing the leg. This was dressed with such splints as I could extemporize aboard and was progressing very favorably when we reached New York. I also attended the families of officers who were aboard. I had a unique experience in having my coffee prepared by the cook. It was found that instead of giving me the genuine coffee which was furnished, a substitute was used in preparing my coffee. Upon remonstrating upon this sleight of hand process, they refused to prepare the coffee at all, and ultimately gave me notice that I could only have access to my mess-chest once a day. The steward rendered my situation so unpleasant in every respect that I was extremely exasperated and seriously meditated pitching him overboard. Eventually taking a practical view of the situation, I appealed to the captain, who ordered the steward to allow me every privilege.

My relations with the officers and passengers aboard of the vessel were of the most pleasant nature, although they had fought on a different side, and the following testimonial has been preserved as a souvenir of my professional service:

U. S. TRANSPORT H. S. HAGAR,
NEW YORK HARBOR, July 20, 1865.

We, the undersigned passengers and officers commanding troops on board the U. S. transport H. S. Hagar, hereby respectfully tender our thanks to Dr. J. McF. Gaston, late surgeon of the Confederate army, for his unremitting care for and humane and skillful treatment of the sick of our respective commands during the trip from New Orleans to New York.

Very respectfully,
IRVING D. SOUTHWORTH,
Captain 25th New York Battalion.
ROBERT C. NICHOLS,
First Lieutenant 13th Massachusetts Battalion, Commanding.

To Dr. J. McF. Gaston, late Surgeon Confederate Army.

This was a peace-offering of the victor to the vanquished and was accepted as an omen of speedy reconciliation between the soldiers of the North and the South. It is true that political reconstruction was slow in materializing, but since the words of brotherly love, written by Henry Grady, the work of restoration has been progressing most satisfactorily. We have noticed especially the growing confidence amongst the medical men of different sections, and the membership of the different societies is made up from all the various regions of our extensive country.

The American Medical Association and the American Academy of Medicine are to hold their annual meetings at an early day in Atlanta, which opens her doors to all who come, and I would close this task by an invitation to the medical men of South Carolina to come and participate in the scientific work of these societies and partake of the good cheer which will be offered by the profession to all our colleagues who may accept of our hospitality on that occasion.

MODERN METHODS IN THE TREATMENT OF SKIN DISEASES.*

BY BERNARD WOLFF, M.D.,

ATLANTA, GA.

The progress of medical science in the last score of years has been as marked in the province of dermatology as in other branches. The classification of skin diseases has been simplified. New groups have been formed as more has been ascertained of the members of them. The advance of the therapeutics of this branch has been particularly energetic and conspicuous. New remedies of great value have been introduced, approved methods of applying them have been employed, until now the dermatologist has the means at his disposal to combat with greatly increased prospect of success the various diseased conditions of the integumentary system which he encounters.

It is impossible, in a paper of such narrow limits, to more than glance at the most salient features of this progress, and to bring to your attention a brief account of the methods now in vogue in the treatment of the commoner forms of skin disease.

The remedies selected for use in cases of disease in the skin can be employed in several ways, as in baths, lotions or washes, ointments, pastes, plasters, and soaps.

Balnea, or baths, are of two kinds, the vapor and the simple medicated bath made to resemble natural mineral waters. The chief purpose of the bath is, besides cleanliness, to bring about a healthy activity of the skin, to remove scales, soften infiltrated areas, increase the elimination of waste products through the skin, and to relieve irritable conditions of the skin. Baths are especially valuable in the treatment of parasitic and syphilitic affections.

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*Read before Georgia Medical Association, Augusta, April 15, 1896.

Vapor-baths are carried out by means of bath-cabinets, in which the patient sits and is subjected to the action of the remedy in a vaporized state, at a temperature of 90 to 100° F., for fifteen minutes or longer. Various drugs may be added to the bath, the chief ones being tar, sulphur, and calomel.

The simple liquid bath has a wide range of usefulness. Starch, tar, sulphur preparations, salt, and a number of other substances may be added to the water to meet the requirements of the case. The continuous water bath of several weeks' duration has been recommended by the elder Hebra for the relief of some inveterate skin affections, as pityriasis rubra, psoriasis, etc.; but such a plan has failed to become popular in this country. Natural mineral water baths, so highly regarded by the laity, are of very questionable value as curative agents in skin diseases.

Lotions are preparations in which the remedy or remedies are held in a state of solution or suspension in water, alcohol, or oil. They are best adapted to be used in the acute and subacute states of disease of the skin. To get the full effect, the lotion should be kept in constant contact with the seat of the lesion by the application of cloths soaked in the solution and bound to the part, or by very frequently repeated sponging or moistening of the part. Lotions are of great value in the relief of itching and irritability of the skin and in squamous affections of the scalp. They are soothing, stimulating, emollient, etc., as the case may be. The remedies best adapted to use in the form of lotions are the class of antiseptics, antipruritics, reducing agents, as sulphur, ichthyol, resorcin, and the parasiticides.

Ointments and pastes are more used than any other forms of preparation in the therapy of skin diseases. The base of an ointment is a matter of importance. Upon it largely depends the benefit to be derived from the medicament. Formerly only lard and wax were used. Now we have a greater number to choose from, and more elegant vehicles. Of these vaseline, agnine, lanolin, adeps lanæ, and resorbin are the most useful. Agnine is obtained from the fat of sheep's wool. It is cheap, but has a disagreeable odor and an unattractive color. Lanolin is purified agnine. It is ivory-colored, stable, very difficult to saponify, mixes readily with water, does not become rancid, and is said to possess the quality of being absorbed through the skin to a remarkable degree. It is rarely used alone, being too tenacious, so that it must be thinned with water, oil, or vaseline. It has slight curative powers, and is bland and unirritating. Adeps lanæ has properties similar to lanolin, but differs from it in being a definite chemical product.

Ledermann (*Monatshefte für Prakt. Derm.*, July 15, 1894,) introduced a new excipient, called by him resorbin. It is composed of refined almond oil emulsified with distilled water, with the addition of a small quantity of yellow wax and lanolin. It is claimed to possess to a very high degree the power of penetrating the skin, very slight friction being required.

Casein ointment has been put upon the market by Beiersdorf, of Hamburg, on the suggestion of Unna. It is very elegant in appearance, but my slight experience with it has led me to regard it as being incompatible with too many substances to be of much practical value.

Ointments, with whatever base, may be cooling and lubricant, penetrating, stimulating, or continuous, as Hebra's diachylon ointment, which is scarcely more than a spread plaster.

To overcome the objections of uncleanliness and lack of sufficient adhesive power of ointments to secure constant and intimate contact with the afflicted areas, various pastes of puffy-like consistence have been devised. Pastes resemble ointments in the facility with which they may be applied, but differ from them in becoming dry and adhering firmly. One of the most generally useful is Lassar's paste, the formula for which is:

℞	Acid salicylic	gr. x.
	Vaseline	℥ ss.
	Zinc oxid,	
	Pulv. amyli aa	ʒ ij. *M.*

Boracic acid may replace the salicylic or resorcin, as in Ihle's modification. This paste is of great utility and can be used on any part of the body with the exception of the palms, soles, and eyelids. The basis of this paste is starch and vaseline. Instead of starch may be substituted infusorial or diatomic earth, which is extremely porous and makes a fine homogeneous paste with vaseline.

The following paste is of great value in the treatment of seborrheal affections:

℞	Zinc oxid	parts 6	
	Sulph præcip	" 4	
	Terræ siliceæ	" 2	
	Adipis benzoat	" 28	*M.*

However valuable these pastes may be, they cannot approach in usefulness the gelatine preparations of Pick and Unna.

Unna's formula for zinc jelly is the following:

℞	Gelatin	15.0	
	Zinc oxid	10.0	
	Glycerin	30.0	
	Aquæ	40.0	*M.*

When cautiously melted and combined this makes a mass of leathery consistence—very pliant. When about to be used, it must be placed in a vessel and immersed in hot water until it is liquefied. It is then painted on the surface with a stiff brush, and dabbed with a bit of loose cotton to facilitate hardening. When hard, it is smooth, dry, pliant. It can be used in any locality, and is extremely efficient. It excludes air, and hastens the absorption of infiltrated areas, allays irritation, and promotes healing. It is to be most highly recommended in the treatment of ulcers of the leg and all stages of eczema in all localities. The cardinal principle of the therapeutics of skin disease is to secure absolute and continuous application of the remedy to the affected parts, otherwise the treatment will be very slow, or altogether ineffectual. Pastes come very near fulfilling this requirement; but there are still better means of accomplishing this aim, and doing it in a much more thorough manner. Passing over the use of collodion as a vehicle, and traumaticine, a solution of gutta-percha in chloroform, we come to what is, without doubt, the ideal method of applying a remedy in the treatment of skin diseases. It is found in the gutta-percha mull, which belongs to the class of, but is much superior to, the ordinary spread plasters. In the gutta-percha plaster mull the medicament is dissolved in a minimum quantity of a suitable vehicle, and is spread on an extremely thin layer of gutta-percha, backed by coarse gauze. The medicament is so disposed throughout the mass that the smallest square of a meter roll will contain its exact proportion of the total quantity of medicament in the meter roll. An exact dosage is thus secured. They are easily applied. The protective gauze is removed and the surface of the plaster is applied directly to the skin, holding it there for a short time until the body-heat affixes it. I have not time sufficient to devote to a detailed account of the manifold good effects of this ideal preparation. Suffice it to say that it may be used anywhere on the body, and with the appropriate remedy incorporated, in any disease of the skin which is not too extensive. It fulfills all indications for treatment in the way of insuring close and prolonged contact, deep and powerful therapeutic effect, and is moreover cleanly in the extreme. The sole obstacle to its general use is its expense. If carefully and economically used, this will not be regarded as an insuperable obstacle.

The impetus given to the study of animal extracts by Brown-Séquard, Pasteur, Hammond, and others has been felt in the province of dermatology. Thyroid extract, which has effected such miraculous cures in the treatment of myxedema and cretinism, has been given a thorough test of its value as a curative agent in certain intractable skin diseases.

The use of soaps is of some importance in the treatment of diseases of the skin. Only neutral soaps, or those containing an excess of unsaponified fat, are to be recommended. Free alkali is destructive to the protective, horny layer of the skin. The over-fatty soaps make commendable vehicles for various medicaments, the most frequently used of which are hydronaphthol, resorcin, sulphur, tar, corrosive sublimate. They act as emollients, and are of value only as adjuncts to more energetic treatment. The use of soaps has the effect to encourage cleanliness on the part of the patient and cleanliness is one of the prerequisites of successful treatment. The results, with an exception in the case of lupus, which seems to have been somewhat influenced, have been entirely negative. Psoriasis and xeroderma have not been benefited by its use, contrary to expectation. Tuberculin has been tried in tuberculosis of the skin, but has now been practically abandoned.

Electricity as a therapeutic agent has a place in resources of the dermatologist. Good effects have been observed from the use of the current from the static machine in cases of eczema, and galvanism has been successfully employed in the treatment of acne, alopecia areata and a number of other cutaneous disorders. The principal use for electricity in the province of skin diseases is found in its employment for the removal of superfluous hairs and of new growths of small extent. Electrolysis offers the only certain means of completely and almost painlessly destroying hairs and preventing their recurrence. A little experience with the use will readily demonstrate the fact. I use instead of the ordinary steel needle the bulbous-pointed needle devised by the late P. S. Hayes, known under his name. The blunt point removes, to a large extent, the danger of piercing the wall of the hair follicle, an accident that is very apt to occur in using the sharp needle, in which case the papilla is not reached and the treatment fails of its purpose. The removal of nævi, moles, warts, and small malignant new growths of the skin by electrolysis is a well established surgical procedure.

The above brief résumé of the modern methods of treatment of skin disease will, I trust, indicate in some measure the progress which has been made. There is need of much more before we shall be contented with the methods at our command. It is to be hoped that continuous research along this line will be fruitful of results in the future as it has been in the last decade.

"I AM not always in a great hurry to operate in appendicitis, but I am more inclined to wait for the more acute symptoms to wear off, and operate, if at all, after suppuration has taken place, or during the quiescent stage between the attacks. I wish my voice was strong enough, just here, to call a halt to the men who say, 'Operate at once—not this afternoon or to-morrow, but now,' in all cases when the disease is recognized."—*McGuire.*

REMARKS ON ABDOMINAL PTOSIS, VISCERO-PTOSIS, ENTERO-PTOSIS, OR GLENARD'S DISEASE.*

By HUGH M. TAYLOR, M.D.,
Richmond, Va.

The occurrence, very recently in my practice, of two cases of displaced kidney with well marked renal or Dietl's crises, awakened an interest in that curious and little understood condition—abdominal ptosis or displacement or prolapse of some one or all of the abdominal viscera. A due appreciation of the clinical importance of viscero-ptosis has been increasing since Glenard's study of the subject.

Recently Mr. Treves has brought it prominently to the attention of the profession, and considered at length the surgical aspect of its treatment.

The cause (or causes) of viscero-ptosis is somewhat a mystery. It is met with more frequently in women, notably women who have borne children. Pregnancy, therefore, seems to occupy an important etiological relation. Prolonged vomiting from any cause may be a causative factor, as may also injuries, prolonged coughing, straining, lowered vitality, general relaxation and absorption of fat. However induced, abdominal or visceral-ptosis is attended by relaxation of the abdominal muscles and elongation of the ligaments supporting or holding in position the abdominal viscera. This stretching of the ligaments and prolapse of the viscera may be limited in extent or occur to such a degree as to give rise to that common condition, movable, floating, or displaced kidney, or the less common condition of floating liver, or the perhaps more common, but less frequently recognized, displacement of the hepatic flexure of the colon and with it the pyloric end of the stomach, liver, etc.

This anatomic pathological change, culminating in viscero-ptosis, usually begins in the right colic angle, and is attended by a gradual descent of the hepatic flexure of the colon until it finally occupies a lower plane in the abdominal cavity. With this descent of the colon, the pylorus is displaced and flexed, its lumen contracted, the contents of the stomach are prevented from passing readily into the duodenum, accumulation and decomposition of the stomach contents results, and entails as a further consequence pain, nausea, vomiting, fermentation, dilatation of the stomach, and a long-continued train of gastric disturbances which are unsuccessfully treated by many physicians in many ways before the true causative agent is recognized. Flexion and obstruction to the passage of the duodenal contents to the jejunum, a fecal stasis with its many injurious consequences may result from prolapse of the right-angle of the colon and traction on the duodenum, and to the stomachic we may have intestinal disorders added.

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*Read before Richmond Academy of Medicine and Surgery, March 24, 1896.

A displaced liver and bile tract may interfere with the latter's function as a drain tract. Forty ounces of bile are discharged per diem; even a partial obstruction by flexion of this tract may favor inspissation, cholelithiasis, cholangitis, or cholecystitis, and to a greater or less extent, possibly cholemia.

Many patients with viscero-ptosis suffer no inconvenience whatever. A majority of those so affected, if they are troubled at all, are so little affected that they are not deprived of comparative good health and comfort. But a good many more than we have in the past so credited, are rendered invalids in this way. In the main such patient's standard of health is below par; they lose their appetite, flesh, and strength, become neurasthenics, experience a sense of weight or dragging in the back and abdomen. When in the upright posture they suffer pain, nausea, vomiting, and numerous vague nervous manifestations, and there may be alternate attacks of diarrhea or constipation, the latter amounting in exceptional instances almost to obstruction.

This condition may induce neurasthenia, or on the other hand, if the ptosis abdominalis occurs in a neurasthenic patient, the discomforts incident to the ptosis are very much intensified.

In not a few instances the condition of chronic invalidism is so irremediable that operative interference is the only curative resource we can offer.

Celiotomy, and shortening by suturing the elongated ligaments, has furnished a sufficient number of successes to stamp it a warranted surgical procedure.

Exaggerated viscero-ptosis is typified in floating, displaced, or movable kidney or liver; the former (floating kidney) a common occurrence; the latter (prolapsed liver) very much less so and less serious. Few practitioners of experience who will look for them, will fail to find quite a number of cases of displaced kidney; happily a very large majority of such cases are neither discomfort nor disease-producers.

The experience of most observers accords with that of Mr. Treves and sanctions the classification of displaced kidneys clinically under three heads.

I. Patients who have displaced kidneys, do not know it, and suffer no inconvenience whatever from it. This type represents by far the largest class.

II. Patients with displaced kidneys, who may or may not know of it, who suffer from gastro-intestinal discomfort and perhaps more frequently a long train of vague neurotic disturbances.

III. Patients with movable kidney, who are the subjects of occasional or frequent mild or severe attacks of Dietl's or renal crises.

The first, the largest class, are never, the second may be, the third, with few exceptions, must be legitimate subjects for operative measures or nephrorrhaphy. In some instances the movable kidney is attended all of the time with gastro-enteric and neurotic manifestations, and only occasionally or from time to time with the condition of Dietl's or renal crises. This fact is well illustrated by a case now under his observation.

An unmarried woman from Eastern North Carolina has experienced for several years, several times a month, sometimes not for several months, violent paroxysmal attacks of pain focused in the right hypochondriac or lumbar region and attended by persistent vomiting and subsequent local soreness for several days. For years she has been treated for gall-stones and hepatic colic. Her appetite, digestion, and nervous system ha vesuffered seriously, and obstinate constipation has been the rule. She has gradually lapsed into a condition of semi-invalidism and neurasthenia. With the train of symptoms presented by this case in its beginning, few practitioners would have failed to associate the manifestations with some morbid condition of the gall-tract, most probably cholelithiasis, but at the present time the mobile kidney can be displaced from its nest and made to prolapse almost into the pelvis; and through the thin abdominal walls its shape can be plainly outlined. The attacks are clearly typical Dietl's or renal crises. This assertion is made with a due appreciation of the fact that we are not warranted in every instance in pronouncing a tumor associated with the above mentioned symptoms unmistakably a displaced kidney. Able clinicians record frequent diagnostic mistakes in this particular field.

The renal crises simulate closely nephritic colic from stone, hepatic colic, or even acute intestinal obstruction, and from all of these a differential diagnosis must be made.

Nephrorrhaphy is clearly indicated in this case and will be performed first, because of the discomfort incident to the frequent renal crises, and second because of the long-continued gastro-enteric and neurasthenic disorders.

There is a diversity of opinion as to what produces the renal crises. In the opinion of some, it is due to torsion or twisting of the pedicle and disturbed vascular and nerve supply. Another, and perhaps correct, assumption is, that it is due to flexion and twisting of the ureter and damming back of the urine, with overdistention of the pelvis and calices of the kidney.

In the second case under observation the violent attacks of pain and vomiting were at first attributed by himself to gall stones in the gall-bladder or cystic duct, as there was no jaundice. The kidney in the early history of the case, before it had wandered a great distance from under the surface of the liver, was mistaken for a distended gall-bladder; there is now such a degree of prolapse that all obscurity in the diagnosis has been removed. No operative procedure has been contemplated in this case because of the extreme age, enfeebled condition of the patient, and because of a serious, long-continued chronic bronchitis. A year or more ago this patient had frequent attacks, but had escaped for many months until within the past week or ten days. The recent attack ensued almost immediately after a very gentle manual examination of the displaced viscus and was obviously due to a twist of the pedicle brought on by the examination. The pain, vomiting, etc., incident to the attack were sufficiently severe to call for repeated doses of morphia for its relief, and as usual in such cases there was persistent soreness for five or six days. Nephrorrhaphy is only contraindicated in this case by the age and feeble condition of the patient and the fact that the crises have been infrequent for the past six or eight months.

To ascertain the existence of ptosis of any of the abdominal viscera, an examination should be made with the patient in the erect or semi-erect position. On assuming the recumbent position, the organs gravitate back to their normal position. In extreme ptosis of the kidney, the viscus can be made to prolapse by instructing the patient to cough, or by pressure of the examiner's hands.

To a very marked extent the discomforts incident to such a condition are relieved when the patient is lying down, and to a limited extent they are ameliorated by mechanical support in the shape of abdominal binders.

When the patient is lying down nothing unusual is noticed in the appearance of the abdomen, but when the patient with general ptosis assumes the upright posture, the upper portion of the abdominal cavity is preternaturally flat, the pelvis unduly prominent.

A better understanding of the clinical significance of abdominal ptosis, including that of the kidney, would widen the field of legitimate abdominal surgery and limit to some extent the scope of dietetic and gastro-intestinal therapy, and indicate the origin of not a few obscure neurotic disturbances.

AN author should say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than anything else.—*Ruskin.*

SOCIETY REPORTS.

THE MEDICAL ASSOCIATION OF GEORGIA.

AUGUSTA, April 15, 16, and 17, 1896.

The Forty-Seventh Annual Meeting of the Association met in the Richmond county courthouse, and was called to order by the President, Dr. Frank M. Ridley, of LaGrange.

The "Address of Welcome" was delivered by Dr. Eugene Foster, of Augusta, which was responded to by Dr. E. R. Anthony, of Griffin.

President Ridley then delivered his

ANNUAL ADDRESS,

in which he forcibly and eloquently dwelt upon several topics of interest to the profession.

The first paper read was by Dr. W. J. Mathews, of Middleton, entitled "The Treatment of Pneumonia."

The author had never seen a case in his experience where he thought the symptoms warranted abortive treatment, owing to not seeing the patient until a few hours after the prodromic chill, the lung then being engorged to such an extent that he thought his efforts would prove futile. Having satisfied himself that he has a case of pneumonia to deal with, his first step is to make the patient comfortable. To meet this end he envelops the affected side with counter-irritation, preferably turpentine. To relieve restlessness, pyrexia and pain he gives phenacetin. Should phenacetin fail, he gives morphine hypodermically. To reduce hyperpyrexia he administers phenacetin, in sufficient doses, every three or four hours in connection with a stimulant, the purpose being to reduce the temperature to 101° or 102°. In his experience phenacetin does not, like some of the other coal-tar products, depress the heart. He advocates the application of blisters. He had never seen a case calling for venesection. To control the pulse he gives veratrum viride every three or four hours with whisky. The overworked heart should be closely watched, its action sustained, and clot prevented. This he does by digitalis and carbonate of ammonia. In the stage of resolution he resorts to supportive treatment. The type of which he had spoken was the acute lobar variety.

Dr. J. W. Duncan, of Atlanta, seldom blisters an adult. In the very initial stage a blister might do some good. He does not give the coal-tar preparations in pneumonia, for the reason that if they are given to reduce temperature they are liable to produce cyanosis. He frequently uses veratrum viride, and considers it a sheet-anchor in this disease.

"Colles's Fracture" was the title of a paper read by Dr. J. B. Morgan, of Augusta. The most common and frequent fractures with which the general practitioner had to do was a Colles fracture. The diagnosis of this fracture is not difficult. The history of the accident, the characteristic deformity, pain and seat of the lesion point at once to the nature of the fracture. Every case of Colles's fracture can be readily reduced by strong, forced dorsal flexion. This is best done under an anesthetic. The best temporary permanent dressing is Wyeth's modification of Pilcher's. The plaster of Paris dressing is an excellent one, and is to be preferred in old people where there is firm impaction which the surgeon does not care to break up, or in cases where the fragments are more or less comminuted. It should be applied from the lower border of the metacarpus to the middle third of the forearm, with the patient's hand in the straight position. A straight dorsal splint may also be employed, but it is not as desirable as the plaster of Paris. Under no circumstances use the angular, crooked, or pistol-shaped splint, and no form of splint should be allowed to project beyond the metacarpus. The fingers must remain freely movable to prevent stiffness of the joint. Limited motion should be encouraged at first; later, active and free. In aged patients, where we have more or less impaction of the broken ends, reduction should not be attempted, as it is better to have a crooked deformed wrist than a failure in bony union, and impaction favors the consolidation of the fractured bone.

Dr. W. L. Champion, of Atlanta, contributed a paper on "The

Importance of Careful Chemical and Microscopical Examination of Urine in Applicants for Life Insurance." Within the past few weeks the author had examined patients with kidney lesions, who a few days or weeks previously had applied for life insurance and had been recommended as good risks. Every medical examiner, after due deliberation, ought to be able, after making a thorough physical examination, having considered the applicant's predisposition to any disease, and last but not least, having made a thorough chemical and, if necessary, microscopical examination of the urine, tell the life expectancy of the applicant before him. Cases were cited by the author to demonstrate that a great many practitioners are too prone to overlook the condition of the kidneys, not to make a careful and thorough examination of the urine, not only in examining applicants for insurance, but their desire to formulate a correct diagnosis in diseased conditions should make it so. He urges the extension of chemical and microscopical investigations in this line of work.

Dr. A. W. Stirling, of Atlanta, in the discussion, called attention to some experiments which he had made some years ago, and which formed the basis of a graduation thesis to the University of Edinburgh. Chiefly through the observations of Pavy, Johnson, and others, it was becoming known that every phase of albuminuria was not a cause of Bright's disease. In order to ascertain the actual number of persons in whom albuminuria was present in health, he examined 369 boys between the ages of twelve and sixteen, who belonged to one of the large training ships on the Thames, near London. In order not to make a mistake in regard to the presence of albumin, he examined each one with four different reagents. He found albumin most common three hours after the boys got out of bed and assumed the erect posture, when the percentage was by examination 20.8 per cent. Of the boys that played in a band the percentage of albumin was about 60 per cent., while in those that did not play in the band it was only 12.8 per cent. Mr. Stichel, of Paris, had seen blindness produced by the playing of wind instruments—due, he says, to passive cerebral congestion with a similar condition of the retina and choroid.

Dr. Stirling says that the urine is usually found to be absolutely free from albumin while the patient remains in bed, and it makes its appearance within a variable but generally short time after the erect posture, and independently of food and all other conditions. The albumin continues in the urine for only an hour or two, or perhaps in varying quantity throughout the day, but as a rule it is disappearing in the afternoon, and is entirely gone by bedtime. The ingestion of food has little effect in producing the albumin, and it is not breakfast which causes its frequency of appearance in the morning. Sometimes he had seen a slight rise after a meal, but this is trivial and by no means constant. He had boys brought ashore to the infirmary and confined to bed, and then albumin was absent from the urine until they got up, breakfast or other meals having no effect. He had made very many and various experiments in connection with this subject, all tending to prove the same thing.

He examined 92 other cases, whose ages varied from 5 to 94, with the result that there was an increase in the percentage of people having albumin with advancing years. From 20 to 30 years he found the percentage of albumin to be only 10 per cent.; 30 to 40, 25 per cent.; 40 to 50, 36.4 per cent.; 50 to 60, 66.6 per cent.; 60 to 70, 75 per cent.; 70 to 80, 75 per cent.; 80 to 90, 83 per cent. These observations were confirmed by Grainger Stewart.

With regard to the advisability of insuring cases of cyclic albuminuria, he would suggest that in the present state of our knowledge, the most satisfactory method of dealing would be for the companies to accept an apparently healthy albuminuric at a high premium, agreeing to rearrange this on their being satisfied of the disappearance of the albumin for such a length of time as would give reasonable expectation of this being permanent.

Dr. Bernard Wolff, of Atlanta, read a paper on "The Modern Treatment of Skin Diseases." See this issue.

Dr. M. B. Hutchins, of Atlanta, said the modern treatment of skin diseases should embrace internal as well as local or external treatment. The patient's constitution should not be overlooked, although if he had to choose between local and internal treatment, he should prefer the former in the treatment of 99 per cent. of the cases of affections of the skin. He had not given the plaster mulls of Unna much trial. They had been objected to on account of containing a gutta-percha base, and in any event the dermatologist would have to carefully select the cases in which to use them. With reference to soaps, such as the bichloride of mercury, the chemical change which takes place renders the remedy inert, and it is almost impossible to get any absorption through the unbroken epidermis. Success in the treatment of syphilis by mercurial inunctions is attained, not by the absorption of the mercury through the skin, but by inhalation of the vapors from the mercurial ointment.

As regards gelatin paste, he had used it a little, but thought it was objectionable because it stuck to everything with which it came in contact, particulaly woolen goods.

In some cases of acne on the faces of young ladies, he had obtained good results by using the constant galvanic current to the cheeks where the eruption appeared. The stimulating action which takes place encourages the glands to throw off secretions without allowing them to remain sluggish and thus block up the follicles of the skin.

A paper on "Appendicitis" was read by Dr. Samuel Loyd, of New York City. It was largely statistical. In making his compilation the author began with the earliest recorded cases, and it covers a greater number of medical than surgical cases. The total number examined up to April 5th, 1896, was 558, and the result was that 263 recovered, and 295 died. Of this number 226 were operated upon; 192 recovered and 31 died. On the other hand, in direct contrast to this, 265 cases were treated conservatively; 60 recovered, while 205 died.

A case was cited which the author had seen in consultation, illustrating the course of extraperitoneal abscesses.

According to the table of cases that the author had examined, the pathological conditions could be summed up as follows:

1. Cases in which the disease follows traumatism.

2. Cases following septic inflammations in other parts of the body, such as salpingitis in the female, post-partum septic inflammation of the uterus, typhoid fever, tuberculosis.

3. Direct infection of the mucous membrane of the appendix by its contained bacteria.

4. Alterations in its position and shape so as to occlude its lumen,

preventing the escape of its natural secretions and contained intestinal contents.

5. Changes in its position and pressure upon its mesentery by growths or impacted feces in the cecum.

6. Alterations in its position or shape so as to shut off its blood supply.

7. Foreign bodies, including fecal concretions.

8. There was one other pathological condition about which the author could obtain no information from the cases tabulated, namely, the abdominal tonsil, referred to by Sutherland, Robinson, Yeo Burney, Haigh, and Bland Sutton.

It is probable that in the present state of surgical knowledge the majority of medical men are in favor of surgical intervention in cases tending towards general peritonitis, even though the symptoms do not point to perforation or abscess formation, in the hope that drainage of the abdominal cavity and the removal of the focus of disease may enable the surgeon to forestall what would otherwise be a fatal complication.

Of 445 cases out of 558 that were examined, 79 per cent. resulted in abscess, perforation, peritonitis, etc.

Perforation, without given cause	11
With abscess	10
With ulceration	16
With peritonitis	32
With concretion or foreign body	41
With gangrene	7
With gangrene and concretion	19
With inflammation	13
With hardened feces	1
With concretion and peritonitis	24
With foreign body and peritonitis	7—181

ABSCESS WITHOUT PERFORATION.

Uncomplicated	136
Containing concretion	19
With perforation	2
Sloughing appendix	2
Foreign body	1—160

Foreign bodies	36	
Fecal concretions	26	
Inflammation of the appendix	8	
Enteroliths	2	
Gangrene of the appendix	9	
Gangrenous appendix with concretion	2	
Inflammation with concretion	3—	86
GENERAL PERITONITIS.		
With concretion	5	
Foreign body and gangrenous appendix	1	
Foreign body	3	
Ulceration	1—	10
Total		437

It will be noticed that this is a dismal showing for the conservative treatment of appendicitis. The author believes that no case of appendicitis should ever be considered as purely medical. When one is called to a patient, it is his duty to immediately prepare for operative interference. He would advise operation in every case, after studying the subject carefully, where the symptoms showed any tendency to increase. If a tumor was present and the symptoms suggested the possibility of the presence of pus, he would surely operate.

Dr. E. H. Richardson, of Atlanta, followed with a paper on "The Medical Side of Appendicitis." He cited the opinions of eminent medical practitioners, both in this country and Europe, in favor of non-operative interference in a large proportion of cases.

Dr. W. H. Elliott, of Savannah, said the foremost difficulty in cases of appendicitis was to know when and when not to cut. No man was fit to treat appendicitis who was not absolutely willing, at any moment that he might be needed, to open the abdominal cavity.

Dr. Willis F. Westmoreland, of Atlanta, was quite sure that in every case of relapsing appendicitis he had seen, there were adhesions from previous attacks. Some of these cases had died. If they had been operated on in the primary attack, the chances would have been better for their recovery. He would open the abdomen as soon as appendicitis was diagnosed, if the patient would permit it.

Dr. Thos. R. Wright, of Augusta, considered the operation for this disease very difficult, for the reason that no two cases were alike. It was an easy matter to cut down, but if pus and adhesions were found around the appendix the operation was extremely difficult.

Dr. J. W. Duncan, of Atlanta, had seen and treated medicinally several cases of appendicitis during thirty years' practice, one of them having died from a recurrent attack a few months after the primary one. He was satisfied that many cases operated upon were nothing but typhoid fever, and that other cases thought to be typhoid fever were really appendicitis.

Dr. J. B. S. Holmes, of Atlanta, considers the disease a surgical one, and thinks it is safer to operate as soon as a diagnosis is made. The only cases he had lost were those that had been treated medicinally from two to four days previous to operative interference. It an early operation is performed, the mortality should be small.

Dr. Wm. H. Doughty, of Augusta, maintained that it was not prudent to operate upon every case of the disease as soon as the diagnosis was made, for the reason that the surgeon does not always see the cases in their incipiency. If he did, it would be safe to remove the appendix, as the chances were that at this time there would not be pus formation; in other words, the surgeon would have a comparatively clean condition within the abdominal cavity, and the mortality of operations done under these circumstances ought to be small.

Dr. M. L. Boyd, of Savannah, took the position that if all cases could be diagnosed early, it would be wise to operate at once.

Dr. George H. Noble, of Atlanta, thought it was extremely unfortunate that the general practitioner should view appendicitis from a prejudiced standpoint. There were undoubtedly many cases of the catarrhal form that were relieved temporarily, or cured by purgation, possibly permanently. Where we have rupture and the discharge of the contents of the appendix into the peritoneal cavity, we have the fulminant form of the disease, and in such cases very prompt and active measures must be instituted. He advocated early operation.

Dr. L. G. Hardman, of Harmony Grove, said that while there were cases of appendicitis calling for the services of the surgeon, there were others that could be treated successfully by medicinal measures. Of fifteen cases which had come under his care, only two were operated upon. All recovered, both the operative and non-operative cases. In the cases operated on suppuration had occurred, and one of the patients, a physician, was present.

A paper on "Some Albuminuric Complications of Pregnancy" was read by Dr. Howard J. Williams, of Macon. He said this complication was present in from 6 to 50 per cent. of all pregnancies. On the other hand, puerperal eclampsia was comparatively rare. From January 1, 1891, to March 31, 1896, he had encountered ten cases of albuminuria or toxemia in 163 pregnancies, and two cases of eclampsia in this number (ten cases). This gives 6 per cent. of toxemia and about 1 per cent. of eclampsia. The percentage given is based upon accurate analyses of the urine of every woman he had attended during the time mentioned. Albuminuria may be present in varying degrees, from a mere trace to a very large per cent., the urea and other excreta accumulating in the blood in the same proportion. The toxemia is slow or rapid according to the degree of retention of the latter from the outside. These variations were shown by the recital of three cases.

The cardinal indications are to promote elimination of the toxic materials circulating in the blood and to restore the excretory organs to their normal functions. If, however, the poisoning is excessive and the life of the mother and the fetus is at stake, then the indication is to promptly empty the uterus.

Elimination is preëminently indicated for all forms of kidney disease, and in this complication it yields the best results. But if it cannot be tolerated or disagrees, a more liberal diet should be given, such as the white meats of fowls, fish, oysters, fresh fruits, and good, nutritious breads. Remedies to promote elimination by the kidneys were then dwelt upon. Nervous excitement should be controlled by sedatives and narcotics, though not to the extent of interfering with eliminative measures. Elimination of the waste products having failed to restore the functions of the excretory organs and the condition is urgent, eclampsia being imminent or other complications alarming, the uterus should then be emptied.

Dr. R. B. Barron, of Macon, then delivered the "Orator's Address." He dwelt upon and pleaded for higher medical education.

Relative to practicing medicine purely for money, he said that money with the true physician was of secondary consideration; that the real incentive for the best work with those practitioners who achieve success was that broad humanitarianism which impelled with resistless force the commissioned agents of God Almighty to relieve suffering, to stay the pangs of agonizing pain, to fight to the bitter end humanity's implacable and unconquerable enemy, death, regardless of any other consideration.

"The After-Treatment of Tracheotomy Cases of Membranous Croup" was the title of a paper read by Dr. R. M. Harbin, of Rome. (See this issue.)

Dr. J. B. S. Holmes, of Atlanta, reported several interesting surgical cases.

"A Case of Enormous Ventral Hernia Cured by a Plastic or Flap Operation," by George H. Noble, of Atlanta. The subject was a very large woman, who came to him from a neighboring State, giving a meager history, saying that the protrusion first appeared after severe straining, and grew rapidly until it reached the size of an adult head. The treatment she had received consisted in local applications only, no attempt at operative measures having been made. The case is of considerable interest on account of such a large hernia in this region and because expansion of the ribs prevented closure of the ring by approximation of its margins, necessitating, therefore, a plastic or flap operation to close the aperture, which was large enough to pass a closed hand through without resistance.

The operation consisted of: (1) Trimming away the excess of the sac and uniting the peritoneum with buried catgut sutures. (2) Four strong tension sutures were passed through the abdominal walls, piercing the semilunar lines down to the peritoneum, but not implicating it. (3) The semilunar flap was carefully outlined upon either side over the recti muscles with a straight or vertical side upon their outer margins and the convexed borders turned toward and extending to the hernial ring. The aponeurosis of the external oblique and the outer layer of that belonging to the internal oblique muscles were cut through and the flaps liberated except where their bases joined the ring and turned over the opening, accurately abutting the edges, in which position they were stitched with buried silk sutures. The convexed borders coincided with the margins of the ring to which they were made fast. (4) The recti muscles were brought in direct apposition by surrounding them with the large catgut, thus adding another layer of strong tissue over the hernial opening. (5) The skin and fatty tissue were then brought together and the tension sutures tied over all, the wound dressed antiseptically with firm pad, roller bandages, etc. The wound proved entirely aseptic, and the result was very gratifying. In another such case the reader would use buried silver sutures instead of absorbable materials.

Dr. M. B. Hutchins, of Atlanta, read a paper on the "Treatment of Skin Disfigurements by Electrolysis." That electrolysis has a wide application and a legitimate use, he was convinced by his own experience during the past five or six years. To do the work outlined in the paper a few galvanic cells, a sponge electrode, a needle-holder, and for accurate work, a milliamperemeter, are necessary. In most cases the needle should be attached to the negative pole. The current used is weak, and varies from three to seven or eight cells. With a milliamperemeter it is found that we get from one to five milliampères from this current to the relative position of the electrode, the greater amount of intervening tissue reducing the current by resistance, a lesser interval increasing it. The number of needles used, the manner of grasping the sponge electrode, the wetness of the sponge, all influence the strength of the current. The strength of current used in these operations is harmless to the patient, and would not be felt upon the unbroken epidermis.

For the removal of superfluous hairs on the face of ladies, electrolysis was the only method. Many of the patent hair removers were excellent stimulants to its growth. A lounge, good eyes, a good light, a steady hand and perseverance were necessary. Dr. Hutchins had never seen any injury result from the treatment of moles by electrolysis. He had removed one by excision which had become epitheliomatous through a razor cut. There was no recurrence. Moles with hairs in them will frequently disappear from the simple effect of the current used in destroying the hairs, but destroying the mole does not always destroy the hairs, as they are deeper.

Warts of various kinds, so tedious of treatment with the old methods, save that of excision, with or without cauterization, usually dissolve into froth under the action of electrolysis, being more easily destroyed than the average mole. The author then dwelt upon electrolysis in the treatment of epithelioma, small fibromata, milia, sebaceous cysts, keloids and hypertrophic scars, comedones, angiokeratoma, etc.

The paper was based almost entirely upon the author's own practical experience, and his implicit faith in this method of treatment is due both to results in practice and upon himself.

Dr. M. L. Boyd, of Savannah, followed with a report of a few interesting surgical and gynecological cases.

"The Use of Subconjunctival Injections of Mercury in Certain Forms of Eye Diseases," by Dr. Dunbar Roy, of Atlanta. In this paper the author tabulated twenty-five cases of various eye affections, and his experience leads him to the following conclusions: (1) In infected processes of the cornea, ulcers, abscesses, wounds, etc., this method of treatment is quicker and therefore more satisfactory for clinical purposes than those usually employed. (2) In acute iritis it does not seem to exert any beneficial influence, but produces great pain, while in other cases the pain is mitigated. (3) In chronic iritis and iridocyclitis the pain and congestion are often markedly influenced for the better, but it has no effect whatever upon adhesions of the iris to the lens of the capsule. (4) In post-operative infection and panophthalmitis it is by far the best method to which we may resort for good results. (5) In pannus of the cornea absolutely no effect was produced one way or the other. (6) With lesions of the choroid and other deeper structures of the eye he had had no experience, but expects to try this method whenever a case presents itself. From his personal experience he would unhesitatingly say that we cannot depend upon subconjunctival treatment alone, but as an adjuvant it is most excellent, and in some cases produces results far more beneficial than were expected.

Dr. A. W. Stirling, of Atlanta, read a paper on "Glaucoma in Relation to General Practice." He said that glaucoma was to the ophthalmic specialist one of the most interesting of diseases, comprising one per cent. of all ophthalmic troubles. While he believes that every case of the disease requires the most skillful advice that can be obtained, still it is the first and foremost affection which comes within the province of the general practitioner, and with him lies frequently the ultimate safety or destruction of the eye involved. The reader reported several interesting cases, after which he dwelt upon the variability in tension. Coming to the treatment, he counselled against the indiscriminate use of mydriatics, especially atropine, scopolamin, and cocaine in affections of the eye. Glaucoma had often resulted from the use of these agents, and is almost always accentuated by them. In most ocular diseases they are harmful, and the general practitioner would do well to remove them from his list in ophthalmic practice, except when he knows he is dealing with an uncomplicated keratitis or an inflammation of the iris. On the other hand, in myotics, and notably in eserine and pilocarpine, we have a fairly certain means of temporarily benefiting many cases of glaucoma, and of saving valuable time till the most suitable method of treatment can be decided on.

The following officers were elected:
President—Dr. Geo. H. Noble, Atlanta.
First Vice-President—Dr. J. B. Morgan, Augusta.
Second Vice-President—Dr. R. B. Barron, Macon.
Secretary—Dr. R. H. Taylor, Griffin.
Treasurer—Dr. E. C. Goodrich, Augusta.
Place of meeting, Macon, April, 1897.

HE—I should think medicine would be a peculiarly difficult profession for a woman. She—Why? He—In order to succeed, she would have to give up trying to look young.—*Puck.*

EDITORIAL.

The office of the Business Manager of The Journal is Nos. 311 and 312 Fitten Building.

The editors are not responsible for views expressed by contributors.

Articles for publication should reach this office not later than the 15th inst.

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Reprints of articles will be furnished, when desired, at a nominal cost. Requests for the same should always be made *on the manuscript*.

THE AMERICAN MEDICAL ASSOCIATION.

The forty-seventh annual session of this Association will be held in Atlanta from the 4th to the 8th of May. The Association met here seventeen years ago, in its thirtieth annual session. The lapse of time has wrought many changes both in the Association and in the city which entertained it.

Dr. Theophilus Parvin, then of Indiana, was President of the Association at that meeting. Among the distinguished visitors then present were Dr. S. D. Gross, of Philadelphia; Dr. N. S. Davis, of Chicago; Dr. Jno. S. Billings, U. S. Army; Dr. Stanford E. Chaille, of New Orleans; Dr. H. Knapp, of New York; Dr. Moses Gunn, of Chicago; Dr. A. C. Post, of New York; Dr. J. M. Toner, of Washington City; Dr. W. O. Baldwin, of Montgomery; Dr. Robert Battey, of Rome; Dr. Lewis A. Sayre, of New York; Dr. J. J. Woodward, U. S. Army; General Francis A. Walker, of New York; Dr. T. G. Richardson, of New Orleans, and others. The Address of Welcome, on behalf of the Committee of Arrangements, was delivered by Dr. Jos. P. Logan, who extended a "thrice-reiterated welcome to our State, our city, our homes, and our hearts."

The report of Dr. Seguin, of New York, on the adoption of the metric system was received and entered on the minutes. Dr. N. S. Davis read a report of the Committee on Ozone, and suggested the advisability of systematic daily observations concerning the "electric and ozonic conditions of the atmosphere," with respect to the "causes, conditions of spread, and consequent means for prevention of all the more important diseases." The Committee on Prize Essays reported the first prize awarded to Dr. Allen McLane Hamilton, of New York, for an essay upon "Certain Forms of Degeneration of the Lateral Columns of the Spinal Cord, with Special Reference to a Rare Infantile Form." Dr. Lewis A. Sayre, of New York, was elected President for the following year, and the present President, Dr. Beverly Cole, was made first Vice-President. The Address on Medicine was delivered by Dr. Thomas F. Rochester, of Buffalo; the Address on State Medicine and Hygiene was delivered by Dr. Billings; the Address on Obstetrics was delivered by Dr. E. S. Lewis, of New Orleans; Dr. Gunn, of Chicago, delivered the Address on Surgery and Anatomy; Dr. Knapp made a report on the Progress of Ophthalmology and Otology. These were all the sections of the Association at that time. Among other interesting papers read at that meeting was one by Dr. Sayre on the "Superior Value of the Treatment of Pott's Disease by Suspension and Retention by the Plaster-of-Paris Bandage"; one by Dr. H. F. Campbell, of Georgia, on "Urinary Calculus"; one on "State Medicine and State Medical Societies," by Dr. S. E. Chaille, of New Orleans; one on "Diseases of the Mastoid Cells," by Dr. Knapp, of New York; one on "Reparative Operations for Burns," by Dr. A. C. Post, of New York, etc.

A reception by Governor Colquitt at the Executive mansion, a visit to Stone Mountain and other interesting points in and near the city, and a barbecue at Augusta, composed the main social features of the meeting.

The Association was given a hearty welcome then, just as it is now. Atlanta then numbered forty thousand souls; to-day we have more than one hundred thousand, and as some one has already said that as Atlanta has reached its present dimensions without apparent cause, so there is equally good reasons for believing that it will yet be as large as London. We trust that this meeting of the Association will be successful throughout all the departments of its great work, in everything that will advance the glory of American medicine and surgery; also, that our visiting friends may take home with them only pleasant recollections of this meeting, of our city and of her people, and that all may feel that "it is well for us to have been there."

And when you and your successors come again, gentlemen, we will show you a bigger city, possibly more doctors, but you will not get a warmer welcome.

THE ASSOCIATION AT AUGUSTA.

In another place will be found a detailed report of the late meeting of our Association. While the meeting was perhaps not quite so well attended as others have been, it was highly successful, both from the character of work done, and for the recreation which it afforded the members. The address of welcome by Dr. Eugene Foster was in this learned gentleman's usual happy style. After reciting some of the objects and achievements of the Association, Dr. Foster reviewed some of our State medical history, mentioning the names of the men who have reflected distinction and honor upon our profession; such as Antony, Daniel, Dugas, Ford, Eve, Fort, Banks, Long, Campbell, Westmoreland, Battey, etc. He also congratulated the Association and the profession upon the final success of the efforts to obtain a good examining board. The response by Dr. E. R. Anthony, of Griffin, was eloquent and full of feeling.

The papers presented were fully equal to those usually read at these meetings. The paper by Dr. Samuel Lloyd, of New York, on "Appendicitis," was particularly good, calling forth considerable discussion. A good abstract of papers appears in this issue.

The thanks of the visiting members are heartily due the local profession for the elegant social features which contributed so much to their entertainment. The barbecue at the *Deutcher Scheutzen Platz* was a great success and highly enjoyed. So was the musicale, which was kindly furnished by some of the well-known musical talent of Augusta. The members are much indebted to the profession and the citizens of Augusta for a very pleasant stay in their city.

THE CASE OF KITSON VS. PLAYFAIR.

This late case, which, from the prominence of the parties and the nature of the charges, has been of such interest in London and elsewhere, will probably create a precedent among cases of its class in determining how far physicians may be justified in communicating professional secrets to their families.

Mrs. Kitson being ill, sent for Dr. Playfair, who, by the way, was the husband of her husband's sister. Mrs. Kitson's husband had been absent from London for more than a year. From examination of the plaintiff Dr. Playfair was convinced that she had not been a virtuous wife, and the doctor so told members of his own family in order to guard them against a woman who, in his opinion, was unfit for their society. Mrs. Playfair's brother (Sir Jas. Kitson) them withdrew an annuity of $2,500 which he had been accustomed to allow the Kitsons.

Hence a suit against Dr. Playfair for $60,000 damages. The defendant, instead of pleading the truth of his statements, set up as a defense that his communication of the alleged facts was based upon his honest belief and was privileged. Neither the judge nor the jury, however, took this view of it, and both were said to be in sympathy with the plaintiff. Mrs. Kitson was given a verdict for the full amount of damages, and the judge refused to allow the case to be appealed.

This is certainly one case where silence would have been golden.

WE are requested by Dr. C. M. Drake, the Chief Surgeon of the Southern Railway Company, to announce to members of the American Medical Association, that the Southern Railway Company will give to the members and their families a complimentary excursion on Wednesday, May 6, 1896, from Atlanta to Lithia Springs, Ga., and return, on the occasion of an old-fashioned "Georgia barbecue," to be given at the Springs on that day by Mr. Marsh, under the supervision of the Committee of Arrangements of the American Medical Association.

The Chief Surgeon of the Southern Railway Company has also the pleasure of announcing a complimentary journey to be extended to a limited number of distinguished members of the American Medical Association, to leave Atlanta on the evening of Friday, May 8, to visit Lookout Mountain and Tate Epsom Springs, Tennessee, Hot Springs, Asheville, and the "Land of the Sky," Western North Carolina, returning to Atlanta. Invitations for this excursion will be issued to members of the Association after registration with the permanent Secretary.

SELECTIONS AND ABSTRACTS.

MISCELLANEOUS.

A Physician and Surgeon's Right to Compensation.

A physician and surgeon's right to compensation depends upon contract, express or implied. The services of a physician being valuable, the law will imply a contract to pay a reasonable consideration therefor by any one receiving the benefit of such services. As example and authority it has held that where a physician was summoned to attend his aunt upon matters of business, but while with her rendered valuable medical attention which she accepted. The court said he was entitled to recover for such services.

A demand by a physician against the estate of a decedent must be proved strictly; no promise can be implied in favor of claimant without undoubted proof of service rendered. In Indiana it has recently been held that a demand by a physician against the estate of a decedent must not only be proved strictly, but claimant must also allege and prove that he was at the time the services were rendered a regularly qualified and licensed physician.

It has been held, that where a physician is called in consultation by an attending physician, he may recover his fee from the patient, although there may have been an engagement between the attending physician and the patient that the former should pay the consultation fee.

An implied contract is in the first instance usually with the patient, or where one stands in such relation with the patient as to be liable for necessaries furnished him, as the relation of parent and child, husband and wife, guardian and ward, the implied promise is by such person.

In case of surgeons, where patients suffering from dangerous diseases are left in their care, operations may be performed on them without notice to those who placed them in the surgeon's care. And if death results the surgeon may recover against them for compensation, because such performance or operation is within the scope of a surgeon's authority and judgment. It is not necessary or incumbent on the surgeon to prove that it was necessary or proper under the circumstances; and a defendant cannot escape payment of such fee on the ground that the surgeon gave him no notice, or prove that it would have been dangerous to the patient or patients to wait until notice could be given.

A promise of a third person to pay for medical services rendered another may be inferred as in any other case, where the circumstances are strong enough. Thus, where a person called at the office of a physician and left his business card, having written on it, "Call on Mrs. A., No. —St.," with the clerk, requesting him to tell the physician to call at once, it was held that he became liable to pay for the physician's attendance upon Mrs. A.

Where a justice of the peace acting as coroner requested a physician to examine a body over which an inquest was being held, it was decided that he was entitled to an allowance from the county.

In an action to set aside a will, two physicians were appointed by the court to examine and report whether the widow of the testator was pregnant. *Held*, that they were *quasi* officers of the court, and were entitled to be paid out of the estate, without awaiting the termination or event of the litigation.

A county is not liable to a physician for services rendered to paupers. There is no implied promise by a county to pay for services rendered by a physician or surgeon to the poor if there has been no judicial ascertainment that the person cared for is a pauper. The presumption is rather that the physician looks to his patient for pay or bestows his services in charity.

As a rule the majority of the States operate under a statute providing for a contract with physicians to attend the poor in certain districts. But in some cases a county has been held answerable to physicians for services rendered in cases of emergency to persons who are chargeable upon the county or who became so immediately afterward. So held in Penn., Kas. and Indiana.

It is no part of the duty of a physician employed under contract by a county to treat its poor to make a *post mortem* examination of the body of a dead pauper, and when he does so at the request of the coroner he is entitled to compensation.

No recovery can be had where there is no implied promise to pay. Thus, where a person, or messenger, was sent for a physician, and not finding the one sent for, spoke to another, and on his arrival, before any service was performed, in his presence, the manner of his employment, and the value of the service to be performed were explained to the patient. *Held,* in an action by the physician against the messenger, that the latter was not liable.

Where a physician was employed to attend the employees of a plantation, found a surgical operation necessary on one of the employees and requested the overseer to send for another physician, who came and performed the operation without any assistance from the plantation physician. *Held,* that no action could be maintained against the plantation physician by his brother physician for the services rendered.

A physician cannot recover of a brother of an insane person for medical attendance rendered the latter, at the request of such brother, unless there was an employment under such circumstances as to show an intention on the part of such brother to pay for the services, and so understood by him and the physician.

Where a party was under bond for the support of a patient, who had called in a physician without the consent of the defendant bondsman, no implication arises that the defendant will be answerable for the physician's services.

If a physician or physicians attending a woman deem it necessary, for the preservation and prolongation of her life, to perform an operation, they are justified in doing so, if she consents, whether her husband consents or not.

The degree of care and skill required of physicians is that reasonable degree of care and skill which physicians ordinarily exercise in the treatment of their patients.

A physician does not insure that his treatment will be successful, but he is bound to bestow such reasonable ordinary care, skill, and diligence as physicians in the same neighborhood, in the same general line of practice, ordinarily have and exercise in like cases.

One who holds himself out as a healer of diseases, and accepts employment as such, must be held to the duty of reasonable skill in the exercise of his vocation; failing in this, he must be held liable for any damages proximately caused by unskilled treatment of his patient.

The employment of a physician continues while sickness lasts, unless put an end to by the assent of the parties or revoked by the express dismissal of the physician.

The mere failure to effect a cure does not even raise a presumption of a want of proper care, skill, and diligence in a physician.

A clairvoyant physician is liable for failure to exercise the ordinary skill and knowledge of a physician in good standing, practicing in the vicinity, and not merely the ordinary skill and knowledge of clairvoyant. If he holds himself out as a medical expert, and accepts employment as a healer of disease, but relies for diagnosis and remedies upon some occult influence exerted upon him, or some mental intuition received by him when in an abnormal condition, he takes the risk of the quality or accuracy of such influence or intuition.

It is the duty of a surgeon who has set a broken leg to give proper instructions for the use and care of it; and for failure to do so he is liable in case of a resulting injury.

A physician employed by a city or county to treat patients in a jail or in an almshouse, will not be relieved from liability to such patient therein for failure to exercise ordinary care and skill, although he is not paid by the patient.

Where a physician or surgeon is employed to treat a patient, without any express special contract defining the character and extent of his duty and undertaking, the form of remedy is either an action of assumpsit or case may be maintained for the breach of the implied obligation arising from such employment, caused by unskillful, negligent, and improper treatment of the patient.—By MR. R. D. FISHER, Reporter Supreme Court of Indiana, *Fort Wayne Medical Magazine.*

PRESENT STATUS OF CEREBRAL SURGERY.

At the twenty-fourth session of the German Congress of Surgery, held at Berlin, Professor von Bergmann said: Thanks to the introduction of antiseptic methods and the steady advance realized by physiologists and clinicians in the domain of cerebral localization, surgeons now unhesitatingly, and frequently with success, undertake the treatment of diseases, which have hitherto been regarded as incurable. Unfortunately, for various reasons, and particularly the difficulty or impossibility of arriving at a correct diagnosis in many of the cases, the field of cerebral surgery will always be limited. Thus, with regard to tumors of the brain, statistics show that operation is practicable only in 29 per cent. of all cases, and that three-fourths of these cannot be operated upon, on account of the impossibility of arriving at a diagnosis. All our efforts should, therefore, be directed, on one hand, toward defining the diagnostic indications, and, on the other hand, toward perfecting more and more our operative methods. Considerable advance has already been made in the latter direction by the introduction of extensive osteoplastic resections of the skull, which render possible the extirpation of large tumors. Nothing is of more importance than speed in operation, and this can be obtained by the use of an instrument which I am enabled to show you, consisting of a circular saw, set in extremely rapid motion by means of a small electric motor. With this instrument a large bone flap may be sawn out in a few moments, the operation being completed by the aid of a sharp chisel, in order to avoid, as far as possible, injuring the dura-mater.

Numerous attempts have been made to cure epilepsy by surgical treatment; but these attempts have proved unsuccessful, except in those forms of epilepsy, which are due to a lesion of the cortical motor centers. It is necessary, however, to be guarded in drawing conclusions from the results obtained, as cases of temporary recovery of epileptic patients, consequent upon simple trephining or excision of a cicatrix of the scalp, are of frequent occurrence. For my own part, I have seen epileptic attacks cease during the time necessary for the healing of the wound in an individual who had undergone amputation of the leg. It is impossible to approve of operations, which consist in extirpating, in epileptic patients, portions of the cerebral cortex which are apparently healthy, but which are considered to be the starting point of epileptic seizures. Extirpation, indeed, is only justified in cases in which a distinct lesion, a cyst, for example, exists.

Great success has been obtained in operations for abscesses of the brain. Surgeons have even had the courage to attack thrombosis of the sinuses and suppurating leptomeningitis. In this case also the diagnosis is far from being always possible, and in many instances of unsuspected abscesses intervention is, therefore, abstained from. In the very short time at my disposal I cannot deal as fully with the treatment of intracranial abscesses as would be desirable in view of the importance of the subject. I shall, therefore, confine myself to briefly considering the most frequent form of these abscesses, viz., those which follow a suppurating otitis media. In one-fourth of such cases, the cause of the suppuration is a cholesteatoma of the middle ear. Intracranial abscesses, developing under such conditions by continuity, are situated either outside, or within, the dura-mater, or in the interior of the cerebral substance, most frequently in the temporal lobe. In order to reach these abscesses, which are comparatively accessible and, as a rule, located in the portion of the cranial cavity situated above the tympanum, I have devised a method of operation, which, in my opinion, is preferable to the simple trephining usually resorted to in such cases. This procedure consists in resecting a quadrangular portion of the wall of the skull immediately above the external auditory meatus. With this object in view, a cutaneo-musculo-periosteal flap, left adherent at its upper part, is made by three incisions, one horizontal, beginning above the zygoma and ending behind the mastoid process, the others vertical and perpendicular to the former, one in front of the tragus, the other behind the mastoid process, both being carried upward to the height of about four centimeters. Removal of the bone beneath this flap gives unobstructed access to the interior of the skull, and greatly facilitates the task of the operator.

In thrombosis of the sinuses, surgical intervention has given unexpected results. The object of this intervention, as is well known, is to reach directly the transverse sinus—which is the one usually involved—through the mastoid process, the transverse sinus being situated beneath the middle portion of the latter. It is unnecessary to insist upon the details of this operation: incision of the sinus after exploratory puncture, evacuation of the clots, disinfection and plugging, and, lastly, ligature of the internal jugular vein. Of thirteen cases operated upon, recovery followed in six. Death is usually due either to pyemia or to suppurating lepto-meningitis.

Of late, operations have been undertaken, in order to remedy the inconveniences resulting from exaggerated intracranial pressure, from whatever cause. In this connection Quincke's attempts at tapping the lumbar portion of the spinal cord, in cases of basilar meningitis, are worthy of mention. The results obtained so far have only amounted to some improvement of short duration. In no instance has a fatal termination been averted by such puncture; but, on the other hand, it has proven useful as a diagnostic measure, because, if bacteriological examination of the liquid withdrawn reveals the presence of Koch's bacillus, it is evident that it is a case of tubercular meningitis. Possibly puncture may also be of value as an aid to diagnosis, when the existing symptoms do not permit of a differential diagnosis between abscess of the brain and more or less localized suppurating meningitis.—*Practitioner.*

HYDROZONE IN PURULENT OTITIS MEDIA.—A REPORT OF A CASE SUPPOSED TO INVOLVE INFLAMMATION OF THE MASTOID.

Dr. Wm. Clarence Boteler, of Kansas City, Mo., in the *Medical Bulletin*, Philadelphia, Pa., February, 1896, says:

"On November 4th, 1895, I was consulted at my office by Robert P——, aged twenty-four years; occupation, laborer in the Armour Packing Company. The patient complained that for about four weeks he had been suffering from intense pain in his left ear, making it impossible for him to sleep at night, or rest during the day. The pain was so severe that at times he apparently lost consciousness and it seemed to extend through his entire brain. Upon inspection, the man's face was found terribly deformed; an edematous swelling the size of one half of an ordinary loaf of baker's bread occupied the usual location of the ear and the surrounding muscles. The auricle of the ear was almost buried in edematous tissue; upon palpation, the part was found intensely tender, and deep pressure evoked expressions of excruciating pain. The integument and subcutaneous tissue were thoroughly infiltrated. Ichorous, fetid pus was slowly exuding from an almost imperceptible meatus. The patient expressed feelings of chilliness, showing a possible septic contamination of his system. Every indication and sign pointed to possible suppuration of the mastoid cells—tenderness upon pressure over the mastoid being very marked. Efforts to localize the tenderness, whether in external meatus or mastoid, for discriminating diagnosis, were unsatisfactory. I concluded to withhold a positive diagnosis as to whether the condition was purulent otitis media or suppurative inflammation of the mastoid, and used tentative treatment for a short while. I immediately placed the patient under heroic doses of elixir of the six iodides internally. After laborious effort I succeeded in separating the edematous tissue sufficiently to admit the introduction of a small Eustachian catheter into the external meatus. Through this, with a small hard rubber syringe, I injected four times daily about one-half an ounce of hydrozone, allowing it later to drain away, advising hot fomentations. The patient was confined to his bed and the best possible hygienic surroundings provided. In twenty-four hours after the treatment was commenced, the intensity of the odor, amount and character of the discharge had manifestly lessened, the swelling was reducing and the patient feeling better. The edema being lessened, the aperture was enlarged. I now recommended the injection of hydrozone through a catheter of larger caliber, every hour, requiring the head to be kept turned to the opposite side for ten minutes to allow the percolation of the hydrozone as deeply as possible into the middle ear, before reversing the position to allow drainage. We continued this treatment for a week, the man's recovery progressing with remarkable rapidity, his pain and the constitutional symptoms having disappeared about the third day. At the end of eight days the swelling had entirely disappeared, his features were again normal, and he expressed himself as perfectly well. An examination showed a circular perforation in the ear drum the size of a shot, proving that the case had been one of purulent otitis media, with septic contamination of the patient's system, and infiltration of the surrounding cutaneous tissues. Small incisions were made at two different places to permit the exit of pus from the integument. The mastoid was found not involved. The rapidity with which the disease yielded after the introduction of hydrozone through the catheter into the middle ear impressed me with the wonderful value of the preparation; for, struggling with such cases during a practice of seventeen years, I have never seen its efficiency equalled by any medicinal or operative procedures."

MEDICAL ITEMS.

How dear to our heart is the cash on subscription,
When the generous subscriber presents it to view;
But the man who don't pay—we refrain from description,
For perhaps, gentle reader, that man may be you.—*Exchange.*

THE Regular Board of Examiners rejected seven applicants for license in April.

DRS. K. L. REID, and E. C. Cartledge have been appointed internes upon the staff of the Grady Hospital.

THE art of surgery will never advance till professional men have courage to publish their failures as well as their successes.—*John Hunter.*

DR. THEODORE LAMB, of Augusta, Professor of the Principles of Medicine in the Medical College of Georgia, died April 15th, in the thirty-ninth year of his age.

A WRITER says, in an exchange, "For urticaria moisten the wheels with cold water, and rub with salt," etc. The name of the vehicle thus afflicted with urticaria is not mentioned.

IT is proposed to hold the next meeting of the American Medical Association in Philadelphia. The first meeting of the Association was held in Philadelphia forty-nine years ago, and it seems eminently proper that the semi-centennial of the Association should be celebrated in the same place.

THE *National Formulary,* supplement to the *National Dispensatory,* is kindly sent us by the publishers, Lea Brothers & Co., Philadelphia. The *Formulary* contains a complete list of unofficial preparations, with full directions for making the same, and should be owned and used by all who have to prepare and dispense medicines.

WE take pleasure in announcing a series of valuable articles by Dr. Thos. F. Rumbold, of St. Louis, on the Pathology of the Mucous Membrane of the Nose and Throat in Infants, Children, and Adults. The first paper appears in this issue, and three or four others will be published in succeeding issues. We think our readers will find them interesting and instructive.

BROTHER DANIELS, of the Texas *Medical Journal,* is having some vexation of spirit over his printer. By the way, we wonder if this same printer is not responsible for the amusing allusion to that charming book, "*Under* the Bonny Brier Bush," and for the suggestion that "brier" should be spelled with an *a.* Surely Brother Daniels knew better than this. Touch up your printer again, Brother Daniels.

ON March 24th, Senator Gallinger, of New Hampshire, presented petitions and papers from medical men, clergymen, and educators to the United States Senate in favor of setting apart a Government reservation for the benefit of persons in the North suffering from pulmonary diseases, who might be benefited by a change of climate to the salubrious atmosphere of the Rocky-Mountain region. He subsequently introduced a bill setting apart the Fort Stanton Military Reservation in New Mexico.

FRANK LESLIE'S POPULAR MONTHLY is now running an interesting series on the "Lees of Virginia." The introductory article was written by Mrs. Roger A. Pryor upon "The Ancestors of General Robert E. Lee," in England and in Colonial Virginia, and the times in which they lived. This article, and those to follow, will be profusely illustrated, the whole forming an authoritative pictorial chronicle of the distinguished family which has given to America so many statesmen, warriors, and types of chivalrous patriotism.

BEGINNING with April, the Virginia *Medical Monthly* becomes a *Semi-Monthly*. The monthly was organized more than twenty years ago, and under the constant and excellent management of Dr. Edwards, it has always occupied a foremost place in our journalism. The change to a semi-monthly is a change in the right direction, which we hope will still further increase our contemporary's usefulness and prosperity. The first issue of the *Semi-Monthly* (some bad proof-reading excepted) gives promise of being a distinct improvement on the *Monthly*. Success to the *Semi-Monthly*.

ACCORDING to the *Medical Record*, the following kinds of medical men are to be avoided, and we will add, not to be imitated: "The one who has acute exacerbations of insanity when exposed to any one new fad. The one who always sees hundreds of cases of a rare disease. The one who can always match your case and improve on your treatment. The one who always finds you have omitted something in the examination of your case. The one who thinks he can talk well, and is always ready to discuss any paper of the evening. The one who is always ready to do the new operation. The one who is in a chronic fear of being anticipated in his important discoveries. The one who in consultation feels it his conscientious duty to explain to the patient why he differs with the attending physician."

IN St. Louis, after the famous trial and conviction of Duestrow, lately, an expert for the defense said: "In view of the preponderance of evidence going to establish the insanity of the defendant, the verdict was really a great surprise."

An expert for the State said: "In view of the preponderance of evidence going to establish the sanity of the defendant, the verdict was only what was expected."

The jury said: "The evidence given by the medical experts on either side of the case had no bearing on the jury in rendering a verdict."

Such is fame! But the expert testimony in this case is said to have cost nearly $20,000.

PROFESSOR BILLSON says that in well defined secondary syphilis some form of mercury will be the best treatment.

Professor Air says that in renal colic there is apt to be pain over the affected spot, or thereabouts. A hypodermic of morphine will probably give relief. He also says that every pain in the side is not appendicitis.

Professor Air says that a useful and efficient laxative is sulphate of magnesium—a quarter of a pound for breakfast.

Professor Burst says that the new coal-tar product, amidopyrophosphatemethylaminehydroxide, sixty grains every two hours, is the best remedy for subinvolution of the umbilicus after labor.

Professor Steen says that one should not do a laparotomy within two hours after performing a post-mortem or dissecting a cadaver. After a laparotomy, the operator should see that all sponges, forceps, needles, scissors, eye-glasses, lead-pencils, etc., are removed from the abdominal cavity. One cannot be too careful about such things.—"*Class-Room Notes*" *from Bunglesome's Clinical Recorder.*

THE New York *Polyclinic* has lately "touched lightly and compassionately upon the self-imposed ignorance of certain of our brothers in medicine," and has thoroughly proven the existence of such ignorance by certain quotations from medical journals. Thus, one writer describes his treatment of malignant diphtheria: "Fumigation with alcoholic tincture of eucalyptus glob. in boiling water. Restored the action of the skin with aconite, antidoted the poison already generated with echinacea and eucalyptus. Protected the kidneys with equisetum. Supported the action of the heart with tincture of the flowers of phyllo cactus blossoms." In a case of "well mitigated" scarlatina anginosa, the same treatment was pursued and the "soda bath, aconite and cactus, with attention to gargle, kept it mostly to the surface." Another contributor described an awful case of lead-poisoning caused by the chewing of a *lead-pencil.* The *Polyclinic* has done right in calling attention to some of these ridiculous pieces sometimes seen in journals, and it is equally right in the conclusion based upon them that practitioners need to be continually renewing their education. We can duplicate from some of our own rejected manuscripts equally absurd ideas.

IN November, 1895, the Parish Medical Society of New Orleans, La., appointed a commission for the investigation and a public test of Antiphthisin as to its value in tuberculosis, to be made in the Charity Hospital of New Orleans, the commission consisting of the following members: Dr. Edmond Souchon, Dr. A. J. Bloch, Dr. J. D. Bloom, Prof. John B. Elliott, Professor R. Matas, Professor F. W. Parham, Dr. F. Loeber, Dr. Chas. Chassaignac, Dr. John H. Bemis, Dr. Joseph Holt, Dr. H. L. Lewis, Dr. P. E. Archinard, Dr. O. L. Pothier, Dr. A. McShane, Dr. C. J. Landfried.

The treatment of cases began November 27th, and its final report was presented to the Parish Medical Society at its regular meeting, March 28, 1896. The following are the conclusions arrived at:

In Surgical Cases.—A consideration of the three improved cases would certainly lead us to believe that Antiphthisin has decided value, and we should commend its careful, tentative employment in such cases in conjunction with general measures, and the usual, appropriate surgical operative treatment. The glandular case we consider especially encouraging. This case would seem to have required a most serious operation for the removal of the glands, with great uncertainty of ultimate benefit. The improvement under Antiphthisin treatment would alone justify us in ascertaining that we have in this remedy a most valuable aid in the management of such cases. The hypodermic employment of the remedy would seem to be especially advantageous, if administered under careful aseptic precautions.

In Medical Cases.—1. In nearly every case the area of lung involved decreased, if it did not clear up entirely.

2. Ascultation bore out the results of percussion, vesicular respiration replacing to a greater or less degree morbid breath-sounds. In those cases which were classed as cured, the departure from health being only such as is due to the results of every continued pneumonic process.

3. Secretion was diminished even in the cases marked only improved, and entirely absent in others.

4. Bacteriological reports in most cases bore out the results obtained in physical and other examinations.

5. The general condition of the patients improved in the large majority of cases, even in those whose physical examination did not show any great improvement.

6. The use of the remedy was not attended with any danger to the patient.

7. Finally, Antiphthisin does seem to have *curative* and not simply palliative qualities.

BOOK REVIEWS.

TEXT-BOOK UPON THE PATHOGENIC BACTERIA. For Students and Physicians. By Joseph McFarland, M.D., Demonstrator of Pathological Histology, and Lecturer on Bacteriology in the Medical Department of the University of Pennsylvania, etc. One hundred and thirteen illustrations. Price $2.50. W. B. Saunders, 925 Walnut street, Philadelphia.

This book is "intended to convey to the reader a concise account of the technical procedures necessary for the study of bacteriology, a brief description of the life-history of the important pathogenic bacteria, and sufficient description of the pathological lesions accompanying the invasions of micro-organisms to give an idea of the origin of symptoms and the causes of death" (preface).

A good introductory chapter places the reader in touch with the history of the study of bacteria, and of the germ theory of disease. Succeeding chapters discuss the biology of bacteria, the preparation of cultures and culture-media, the methods of observing and cultivating bacteria, sterilizing and disinfection, etc. The second part of the book discusses at length the inflammatory, toxic, and septic diseases in their relations with the respective micro-organisms producing them; such as, tuberculosis, leprosy, actinomycosis, diphtheria, tetanus, anthrax, typhoid fever, pneumonia, influenza, measles, relapsing fever, etc.

The book is complete, well written, well illustrated, and well printed. It will answer every requirement of a useful and practical work on this subject.

DAME FORTUNE SMILED. The Doctor's Story. Cloth, $1.25; paper, 50 cents. The Arena Publishing Company, Copley square, Boston, Mass.

This story is a retrospect from the year 1900. The narrative is simple and makes no pretence of literary excellence. The points, however, attract and hold the attention. The author teaches that the intense life of those who organize and carry through great speculative ventures is very exhaustive and provocative of nervous prostration; that when a man has acquired a fortune he should retire from "the Street" and devote at least a portion of his time and of his wealth to the betterment of the community in which he lives; that the pleasure experienced in giving and the hearty expressions of gratitude from the recipients of his benefactions will have a tendency to promote health and so prolong life. Incidental mention is made of the use of mental suggestion as a therapeutic agent, and running through the story are valuable medical suggestions in regard to preventive medicine for those who work under great nervous strain.

DISEASES OF THE RECTUM AND ANUS. Diagnosis and Treatment. For Practitioners and Students. By S. G. Gant, M.D., Professor of Diseases of the Rectum and Anus, University and Woman's Medical Colleges, Kansas City, Mo.; Surgeon to the German and to the Children's Hospital, etc. Sixteen full-page chromo-lithograph plates and 115 wood engravings. Published by the F. A. Davis Company, 1914 Cherry street, Philadelphia.

This treatise, we are told, is the result of an effort to give to practitioners and students a concise, yet practical work. The subject has been well covered, and all rectal disorders fully discussed from the standpoints of diagnosis and treatment. The author does not go into pathological minutiæ, though the important and essential facts of rectal pathology are by no means neglected. A very interesting portion of the book is the chapter on "Cancer" and "Colotomy," written by Mr. Herbert W. Allingham, of St. Mark's Hospital, London, whose large experience with this particular kind of cases makes him eminently qualified for the task which he assumed. We think practitioners will be highly pleased with this book.

ELECTRICITY IN ELECTRO-THERAPEUTICS. By E. J. Houston, Ph.D., and A. E. Kennelly, Sc.D. Published by The J. W. Johnston Company, 253 Broadway, New York. Price $1.00.

This book will give the reader some assistance in the principles of electricity, and in the many kinds of electrical apparatus which of course underlie the application of electricity to its many uses, including even therapeutics. But electro-therapeutics proper is not discussed, nor indeed are we told when and for what electricity may be used in the treatment of disease. However it is a very good little work on the fundamental principles of electricity.

DIETS FOR INFANTS AND CHILDREN. In Health and in Disease. By Louis Starr, M.D., Editor "American Text-Book of Diseases of Children." $1.25. W. B. Saunders, 925 Walnut street, Philadelphia.

This little book will serve a good purpose in suggesting to the physician in care of artificially-fed infants a suitable diet for different ages and for different conditions of health and disease. It is so arranged that leaves may be removed and given to mothers and nurses. There are also some good directions for the preparation of foods for children.

LIPPINCOTT'S MAGAZINE FOR MAY, 1896.

The complete novel in the May issue of *Lippincott's* is "An Impending Sword," by Horace Annesley Vachell. The hero enters the service of a California millionaire, whose domestic peace is endangered by the threats and wiles of a relentless enemy. Some queer entanglements ensue.

"Resaca," by Maurice Thompson, is a Georgia story of war-times. Carrie Blake Morgan turns from verse to prose to relate a cat's escape "From the Valley o' the Shadder." In "Love in the Afternoon," Clara E. Laughlin tells the successful matrimonial adventure of an elderly bachelor. What "The Fiddle Told," through the pen of Nora C. Franklin, was a story that abridged a life-term of imprisonment.

The tale of "The Last Duels in America" is told in detail by one of the principals in both, William Cecil Elam, now an editor in Norfolk. He tells it without rancor or bravado, and incidentally throws light on a state of society and public opinion now—in that respect at least—happily of the past.

Isabel F. Hapgood writes, out of abundant experience, on "Bed and Board in Russia." The need of "Official Residences for American Diplomats" is pointed out by Theodore Stanton. "Highways of the Sea and the Steamships which Traverse Them" are described by Clarence H. New.

"The Abbey of Gethsemane," to which Allen Hendricks conducts the reader, is the Trappist monastery in Kentucky. "An Overlooked Poet" of a hundred years ago is brought to light by F. M. B. The poetry of the number is by Hattie Whitney, Ida Whipple Benham, Madison Cawein, and Clarence Urmy.

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ORIGINAL COMMUNICATIONS.

PRACTICAL PATHOLOGY OF THE MUCOUS MEMBRANE OF THE NOSE, THROAT, AND EARS OF CHILDREN.

NUMBER II.

BY THOS. F. RUMBOLD, M.D.,
ST. LOUIS, MO.

In the previous paper (page 145) the abnormal conditions of the nose, throat, and ears of infants were considered; in this article the abnormal conditions of the same organs of children will be described. It was not the intention in the last paper, nor is it in this one, or in the ones following on this subject, to describe all the pathological conditions that might occur as a sequence of an inflammation of the organs named, but to describe the conditions as seen in the very great majority of cases within the limits of the ages named. Because of the great number of this kind of cases it is possible and profitable to classify them, they all being of medium severity. Cases of excessive severity, or those of an unusual kind, cannot be classified, there not being enough of them that assume the same degree of severity; they must be described singly.

The Nasal Passages. The inflamed nasal mucous membrane of children—from the third to the tenth year of age—differs from that of infants in the *age* of the inflammation, in the *degree* of abnormality, and in the *character* of the secretion.

A small portion of an infected nasal mucous membrane, from the inferior turbinate of a child, examined by a fifty or seventy-five objective, plainly shows that the inflammation is nearly as *old as the child.* When compared with that of an infant the difference is very manifest. The blood-vessels, the mucous glands, and the other tissues that make up the part under inspection, all give evidence of diseased action that has been for years in active progress. This shows the *degree* of abnormality. Even if we did not have daily evidence of the changed *character* of the secretions, the view under the microscope would assert this change.

While almost all portions of the nasal cavities are in some degree inflamed, the inferior turbinate processes show the greatest effect of the disease, for the reason that the nasal acrid secretion from the superior and middle turbinates has been deposited here. Wherever this irritating secretion rests there is always an increase of inflammation, an increase of diseased action. If this secretion was held on the back of one's hand it would there occasion an inflammation. This inflammation would soon be followed by swelling, and ultimately this swelling would become permanent, that is, it would become a growth. This growth, if in the nasal cavity, would decrease the normal air-space, so that there would be an impediment to the entrance of air to the lungs. The effort to maintain the normal amount of air in the lungs would produce an air-pump effect on all blood-vessels in all parts posterior to the air-obstructing growth. This air-exhaustion, be it ever so slight, is *sure* not only to maintain but to increase congestion, showing that the disease is now self-sustaining.

The Turbinate Processes. While the inflammation commences in the superior portion of the nasal cavity, that is where the stream of inspired air strikes the mucous membrane most forcibly, yet the diseased action is seen to be greater in the lower portions of the cavity. This is owing, as stated above, to the irritating effect of the acrid nasal secretion. The longer this secretion is exposed to the air the more acrid it becomes. By the time it reaches the inferior turbinate process it is far more active in producing abnormal conditions than is the primary disease, showing the great importance of protecting these portions of the nasal cavities from the presence of this acrid secretion.

When the turbinates are examined, post mortem, it is often seen that the blood-vessels of the inferior turbinates are quite large, from four to ten diameters greater than normal vessels. The arteries and veins are still distinguishable; this fact is an evidence that the size of the vessels does not preclude their return to the normal state. When blood-vessels lose their arterial and venous characteristics, as they do in some of the older grades, I do not think that they will return to the normal condition. The middle turbinate shows but slight abnormal change, and the superior turbinate seldom appears abnormal, again plainly showing that the acrid nasal secretion does far greater injury to the mucous membrane, by its retention on the surface, than is done by the primary irritating cause itself—that is, the colds.

Mouth-Breathing. If the disease has been going on unabated with but slight increased severity since infancy, normal respiration will be interfered with, the breathing space through the nasal passages will be lessened either by swellings or growths. In this condition respiration through the mouth *must* take place. It is dangerous to say to a patient that this mouth-breathing is a habit, if it is dangerous to misguide a patient in an ailment. If you say to a boy or a girl, "breathe through your nose," he or she may be able to do so for some time, but if it requires a constant effort, the mouth will open again. There is not any doubt that the effect of forcing cool air through the heated nostrils is beneficial to the swollen mucous membrane, but every person that requires this forced respiration should be a patient of a rhinologist, for the disease will soon compel him to breathe through the mouth whether he will or no, for mouth-breathing induces greater congestion, and additional swellings and growths.

Epistaxis is not an uncommon consequence of the excessive engorgement of the blood-vessels, and is an evidence of such rapid dilation of the vessels that their walls are ruptured. Of course all nose-bleeders have chronic nasal inflammation of more or less severity. If the nervous system does not receive a shock from a protracted nose-bleed, the hemorrhage will have a relieving effect, as the congestion that caused the rupture of the blood-vessels is usually severe enough to occasion disagreeable head symptoms that the loss of the blood relieves.

Adenoid Growths. In infancy there are usually no sphenoid cells, and the posterior ethmoid cells of each side are only large enough to hold about two or three drops of water. At the age of from four to six years—the age when adenoid growths appear—these cells have from four to five times greater capacity and the sphenoid cells will hold about five to eight drops of water. It is mostly the abnormal secretions from these cells—which is quite fluid and very acrid—that causes these growths. This irritating secretion leaves the cells and enters the nasal cavities by openings under the superior turbinate processes. The tendency of the secretion is to pass down the posterior portion of the upper surface of the nasal cavities. It then glides along the roof of the pharyngo-nasal cavity until it reaches the locality where the inspired air strikes this cavity. At this place the abnormally heated air drives away so large a portion of the water of the secretion that it becomes thicker and remains adherent to the mucous membrane. The fact that this acrid secretion remains in one location gives it an excellent opportunity to irritate the mucous glands, and thus occasion the adenoid growths which sprout from these glands. If this irritating secretion had lodged in any other locality where there was a bunch of glands, it would have occasioned growths at that place also.

As soon as the secretion from the sphenoid and ethmoid cells becomes thick, which it almost always does as the child gets older, then it does not flow to the wall of the pharyngo-nasal cavity; consequently no irritating secretion flows to maintain irritation enough to sustain the adenoid growths, then the absorbents take away the growths. This accounts for their disappearance at the ages from seven to twelve years. These growths require for their sustenance a large quantity of blood to maintain them, such as the supply occasioned by the acrid secretion. Sometimes they are seen after this age. I have had a number of such cases, one that of a young man twenty-seven years of age, who had these growths developed so that they appeared below the lower edge of the soft palate.

That the adenoid growths of the pharyngo-nasal cavity are caused by acrid secretion from the sphenoid and ethmoid cells is proved by making an application of very small pledgets of cotton to the highest portion of the nasal cavities (if large pieces of cotton are used the infant cannot tolerate it). This cotton will direct the stream of secretion into the middle of the passages instead of down the posterior wall. The cotton may be allowed to remain there for two days, then removed and replaced by another piece. In two weeks at most the beneficial effect of this course will be manifest. This method of treating some cases is followed by good results.

Ears. In the child the inflammation is of such an age that the secretion is not so fluid as in infancy. It has more pus in it, and the heat—due to increased diseased action—is greater, so that much of the watery portion of the secretion is driven away, consequently the outflow is thicker; this, with the fact that a child does not lie on its back nearly so much as an infant, accounts for the nasal secretion not going up into the Eustachian tubes. For these reasons acute ear-troubles do not frequently originate in this grade. If a child does have earaches, it is altogether likely that they originated in infancy.

When the ears are affected, it is generally due to an inflamed condition of the mucous membrane of the Eustachia canal; the inflammation occasioning a deposit of muco-purulent secretion in the canal that results in marked deafness. This obstructing secretion can only be removed by the inflation of the middle ear and canal with air. Sometimes a fibrinous deposit takes place, then there may be a stricture of the canal, which is always quite a serious ailment, and very seldom relieved. A continuous deafness always results from such strictures, one that but little or nothing can be done to improve.

Tonsil-Growths or Tonsilloids. These growths are uniformly, but incorrectly, called *enlarged tonsils.* They are growths on the tonsils, not an increased size of the tonsils. Because they are formed on the tonsils, I have called them tonsil-growths or tonsilloids. If these enlargements are tonsils, then the child that has enlarged tonsils excised several times would have lost his tonsils several times. I know of a case in which the tonsils were removed seven times. Is there any other organ of the body that can be excised and then *reproduced by diseased action,* and have the excision and reproduction repeated seven times? In the excision of a tonsil-growth, the tonsil is not touched, it always remains in position. The tonsil is never in sight any more than are the lingual glands or the submaxillary glands. When there is a protuberance in sight between the pillars of the arch of the soft palate, that prominence, be it great or small, is a tonsil-growth. Sometimes it has been seen on dissection that when the tonsil-growth is very large the tonsil is pushed farther inward, away from the mouth, and appears as if it was partially atrophied, apparently on account of pressure exerted by the tonsilloids.

A transverse horizontal section of a tonsil with a large tonsilloid grown from it will plainly show—if examined by the microscope with a magnifying power of about fifty diameters—the two kinds of tissue, the tonsillar structure being quite different from the tissue of the growth. In an injected specimen the blood-vessels of the tonsils are uniform in diameter, and the arteries and veins are distinguishable, while those of the growth form a plexus of the vessels of various sizes, closely resembling the growths seen on the inferior turbinates; these arteries and veins are not distinguishable.

Tonsillar Abscess. From what has been said it is seen that there are no abscesses in the body of the tonsil-growths. I do not think that abscesses can form in the body of such growths; abscesses can only form in inflamed normal structure. There may be an abscess in the structures adherent to the upper portion of the tonsilloid or in a tonsil that is covered by a growth, but not in the growth itself. The abscess is mostly always, if not always, above the tonsilloid. The reason for this is that the tonsilloid grows from the tonsil and extends downward; the tonsil is always at the upper part of the tonsilloid. When an unassisted rupture of one of these abscesses takes place it is almost always in the lower part of the soft palate, over the growth, or where the anterior and posterior pillars of the arch of the soft palate meet, just outside of the growth and near the base of the uvula.

THE ACTION AND ADMINISTRATION OF CHLOROFORM.*

BY LUTHER B. GRANDY, M.D.,

ATLANTA, GA.

I make no apology for presenting a paper with this title to the consideration of this Association. The anesthetic, like the poor, is always with us. Other subjects, medical and surgical, may arise from time to time to receive the predominating attention and interest of the hour, but the ever-present and all-important matter of the anesthetic runs its even and constant course, interrupted only now and then by the invention of a new and useless inhaler, or a so-called improved method of giving the anesthetic.

A great deal of time and work and mental energy have been unnecessarily expended upon both sides of the imaginary case of *Chloroform vs. Ether*, and the merits and attractions of the one have been presented as fully and carefully as the disadvantages and dangers of the other. The discussion is quite superfluous except so far as it has served to point out the special conditions suitable and unsuitable for each anesthetic. Chloroform and ether are in a large measure the complements of each other. They have been used side by side since anesthesia was discovered, and they occupy about the same relative positions now that they did forty years ago. Each has its advantages and its proper field of usefulness, and we could ill afford to do without either.

While it is the object of this paper to present some thoughts upon the action and administration of chloroform, I wish to say right now that for the general purposes of an anesthetic in the hands of all persons who may be called upon to administer it, ether is the preferable agent from the standpoint of safety alone. The matter of safety outweighs every other consideration. Ether is the anesthetic of election. Chloroform is the anesthetic of necessity, which should be employed only in the presence of a special indication and by some one trained to use it. The death rate from chloroform (from recorded cases) may be put down as one in three thousand cases; from ether, one in ten thousand. Under chloroform the margin between surgical narcosis and a toxic effect is narrow and often precarious; under ether it is broad and comparatively safe. In the South the general use of chloroform for all purposes of anesthesia is much too common, and I am sure that there have been many deaths from it that have never seen the light.

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*Read by title before the Georgia Medical Association, Augusta, April 16, 1896.

But chloroform cannot and should not be dispensed with. Any one may be called upon at one time or another to administer it, and it is vitally important that it be administered properly.

First, as to the action of chloroform. In late years, thanks largely to the investigations of the Hyderabad Commissions, and to counter investigations conducted by other observers, we have been furnished with an abundance of literature and information upon the phenomena of chloroform anesthesia, and while their results have not been altogether harmonious, they have helped to advance the truth and their influence will be for good. The first chloroform commission appointed by the Nizam of Hyderabad in 1888, after two hundred experiments upon one hundred and forty dogs, announced the following results: (1) Respiration ceased from one-half minute to six minutes before the pulse; (2) the heart continued to beat from three to thirteen minutes after the pulse stopped; (3) artificial respiration restored the animal in every case when commenced within fifty-two seconds after normal respiration had ceased; (4) artificial respiration commenced after the pulse could not be felt was successful in twenty-nine cases and failed in seventeen cases; (5) artificial respiration was unsuccessful in every case where it was commenced after the heart had ceased beating. The second commission (1890) verified the conclusions of the first and added: (1) That death from chloroform is never due to cardiac failure, and (2) that ether is quite as dangerous as chloroform if enough is used to produce true anesthesia. The third commission (1893), consisting of Doctors Hare and Thornton of Philadelphia, agreed in the main with the other two. But these gentlemen made the important concession that while respiratory failure, as a rule, precedes cardiac failure in a healthy animal, the reverse may be the case in a human subject whose cardiac strength and vitality is already lowered by disease. The remarkable statement that ether is as dangerous as chloroform is refuted by clinical experience and figures, the world over, ever since anesthesia has been employed.

Now it must be borne in mind that the above conclusions were based solely upon experiments on healthy dogs. How far we are justified in applying them to the human subject, and to what extent they will be found to conform to clinical experience are open questions, and the most important to be determined after all. Indeed, the final settlement of this, as well as other questions upon which animal experimentation is brought to bear, must be made on the operating table or at the bedside. A human being is neither a dog, a white rabbit, nor a guinea pig, and no amount of laboratory deductions and ratiocinations can take the place of intelligent observations and conclusions based upon actual clinical experience with diseased man. I am afraid that we may be led into a fatal error if we allow ourselves to be guided too much by the Hyderabad conclusions in administering chloroform to man. The warning of Semmola, a few years ago, with reference to laboratory therapeutics in general is as applicable here as elsewhere: "Every so-called scientific construction of the evolution of this or that disease which is based on the investigations of the laboratory will remain a hypothetical structure built upon at least three-fourths of falsehood; and hence form a dangerous guide for the physician who would regard it as the true key to treatment. We should lull ourselves with no illusions in this respect, and I hope that rising physicians will satisfy themselves on this score, that they may not later become murderers of their kind in the name of progress."

Clinical evidence is abundant and conclusive that people have died under chloroform from a sudden failure of the heart and circulation, whether this failure be due to direct effect on the heart muscle or to reflex inhibitory influences through the pneumogastric. Our text-books on materia medica have taught for forty years that chloroform undoubtedly exerts a steady and powerful depressing effect on the heart, and that syncope in many cases is very probably the result of its direct influence upon the heart muscle.* Dr. H. C. Wood says (Dennis's *System of Surgery*): "Whatever the results of experimentation with anesthetics upon the lower animals may be, it seems to me absurd for any one to claim that in man chloroform does not frequently produce death by an action upon the heart. In numerous cases the heart's action has been well tested with full knowledge on the part of the observer that leaders in the profession have declared that chloroform never kills by its action upon the heart, and yet in nearly four cases out of five it has been noted that death came through the heart. If clinical observations upon the simplest questions be of any value whatever, the conclusion must be that in the large majority of cases chloroform death has been due to cardiac arrest." Doctor Wood thinks that physiologists have completely demonstrated that "chloroform is a direct depressant and paralyzant to the heart muscle or its contained ganglia; and that the early fall of blood-pressure which occurs in chloroformization is in great part, if not altogether, due to this direct depression upon the heart." MacWilliam has shown (*British Medical Journal*, October 11, 1890,) that dilatation and weakening of the heart occur during chloroform anesthesia, often early in the administration; that it often occurs rapidly, and that cardiac failure is due to this sudden dilatation and enfeeblement of the organ. He believes that while respiration usually ceases before heart failure, the latter may, and does sometimes, take place a considerable time before the former. The depressing effect of a distended and enfeebled heart is due directly to the action of chloroform upon the heart mechanism.

If now we appeal to clinical experience and examine the records for deaths under chloroform, we find that cases will usually read something like this:

1. Female, thirty-four years. Operation for fistula in ano. Three drams chloroform given. As fistula was divided patient screamed, face became pale, pupils dilated, heart ceased to beat. Respiration ceased in few minutes. *Autopsy:* Heart collapsed, pale, covered with fat, its walls were thin, and showed fatty degeneration.

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*Therapeutics. Its Principles and Practice. H. C. Wood.

Or like this:

2. Male, middle-aged. Amputation of crushed thumb. After few inhalations, patient died. *Autopsy:* Heart fatty, valves diseased.

Or like this:

3. Male. Removal of diseased bone from leg. Heart and lungs examined and pronounced healthy. Only small quantity chloroform given. Patient died three minutes after beginning inhalation. *Autopsy:* Negative.

Or like this:

4. Male, fifty-one. Dressing fracture of the leg. Half dram chloroform given and in two minutes another half dram. Patient became quiet with regular pulse and respiration. After dressing was applied heart stopped, pupils dilated, respiration continuing; latter soon ceased. *Autopsy:* Atheroma of coronary arteries, heart slightly fatty, right side of heart filled with dark blood, ventricles thin.

Dr. H. M. Lyman, in his excellent work on *Anesthesia and Anesthetics*, from which the above cases have been taken, collected four hundred and ten cases of death from chloroform up to 1880. In many of them, where it is not expressly stated that the heart was the first to fail, the circumstances of the death make it reasonable to assume that this was the case; primary cardiac failure is the only rational interpretation that can be placed upon the fatal result. An examination of recorded cases of death from chloroform warrants the statement that more than one-half occur before the period of full insensibility is reached, and in point of time within the first five or six minutes after inhalation is begun, and before a paralysis of the respiratory centers is to be expected. On autopsy, the hearts of persons so dying often show a weakening and thinning of the walls, a fatty deposit on the heart, or a true fatty degeneration of heart tissues or valvular lesions, or some of these combined. Given such a diseased heart (and you cannot tell always when a heart is diseased), acted upon by a powerful cardiac depressant and paralyzant in the hands, possibly, of one unskilled in its use, and a bad result is not to be wondered at.

Now, no one has ever denied, so far as I know, that primary respiratory failure may happen and does happen. I believe that either heart or respiration may fail first, or they may fail together, depending upon causes and conditions which we do not at present entirely understand. Out of three hundred and eighty-four deaths analyzed and tabulated some years ago by a commission acting for the London *Lancet*, in two hundred and twenty-seven the pulse is said to have ceased entirely before respiration; seventy-seven times they ceased simultaneously, and eighty times the respiration stopped before the heart.

However interesting it may be after a patient is dead for one to have noted all the peculiar circumstances attending his untimely taking off, it is infinitely more important for the chloroformist to guard every avenue of disaster and watch for every signal of danger while he is living. I believe that carelessness in the administration of this anesthetic, including the use of it by persons who do not know how to give it, will explain many of the unfortunate results. It is far too common for the operating surgeon to delegate the least experienced of his assistants to give the anesthetic, and this applies to ether as well as chloroform. Americans are more careful of the anesthetic than Europeans, and our death-rate is correspondingly low. In Great Britain alone, between 1880 and 1889 inclusive, there were one hundred and thirty deaths from chloroform. Last year sixty-one deaths from anesthetics occurred in England and the Provinces. Fifty-two of these were due to chloroform. An American surgeon, lately returned from abroad, says: "I can scarcely wonder at the frequent deaths from chloroform which one sees so constantly reported in the medical journals abroad. In six weeks I saw six patients within an ace of dying. The old rule that chloroform should always be given with plenty of air, seemed to be almost ignored. The chloroform was poured in considerable quantities on a towel or napkin, which was pressed close down on the patient's face, so that he breathed almost absolutely pure vapor of chloroform. In each of the six instances I speak of the surgeon had to discontinue his operation, and the patients were restored with difficulty by artificial respiration and rhythmic traction of the tongue."

How, then, should chloroform be administered? I wish to say at once that if pure chloroform be used, by a person who understands it, and the patient be reasonably healthy, at least so far as his lungs and heart are concerned, the danger is reduced to a minimum, and the patient is correspondingly safe. The dangerous impurities of chloroform consist of certain hydrocarbons, aldehyde, free chlorine, and certain methyl compounds, and decomposition products from exposure to light and air, such as acetic and formic acids. If in doubt about the quality of the drug, pour a few drops upon a piece of clean, white paper. After evaporation, if the chloroform is pure, there will remain no odor and no stain. Chloroform should be kept in a dark place, in ground-glass-stopped bottles. Five drops of alcohol to the ounce of chloroform will help to preserve it, without interfering with its virtues as an anesthetic.

The patient's health, and the integrity of his heart and lungs especially, should be in such condition, as far as can be ascertained, as to render the inhalation of chloroform reasonably safe. The chief danger, on the side of the heart, is from fatty degeneration and the consequent weakening of the heart muscle. Endocarditis—even with a moderate valvular lesion—need not debar the use of chloroform (ether being contraindicated)), provided the force and strength of the heart muscle are still maintained. The patient's chest should be examined in a quiet manner and his attention diverted, if possible, from the purposes of the examination. The chloroform should be given, a few drops at a time, on an Esmarch mask. With children, a handkerchief may be used with safety. The patient should be told to breathe naturally. The anesthetic should be "pushed" with extreme caution, especially at first. If the patient be violent and inclined to scream and struggle, special care should be taken to prevent a sudden inhalation of strong chloroform vapor, or ether should be substituted for the chloroform.

Rules have been drawn up with much care about watching the respiration, feeling the pulse and noting from time to time the condition of the pupil, as the patient goes into and remains in the state of anesthesia. Each of these indexes has been advocated by different observers as furnishing a sufficient guide to the patient's actual condition, and the president of the first Hyderabad Commission summed up the duties of the anesthetizer in these words:

"Use pure chloroform, watch the respiration and keep it regular." Others tell us to judge of the patient's condition from the pulse or the pupil. Such I believe to be bad advice. Chloroform or ether cannot be properly administered by rule. Be governed by the patient, and not by a rule. Neither of the above indexes should be depended upon to the exclusion of others, and the man who loses a patient from a failure to take advantage of every available means of information as to his patient's condition would certainly be held culpable. The anesthetizer, either with chloroform or ether, should watch respiration, pulse, pupil, and color of the face. With an intelligent observation of these four things, and a ready appreciation of unfavorable symptoms, on the part of an anesthetizer who confines his attention to his own work and lets the operation alone, there should be fewer accidents, and rarely a death from any anesthetic. About three months ago I gave chloroform to a young man from whom a cystic testicle was to be removed by Drs. Nicolson and Westmoreland. The anesthetic was poured on an Esmarch mask, a few drops at a time, and for several minutes the patient took it fairly well. After about fifteen minutes the face turned pale, the pulse was feeble and frequent, the respiration shallow, and the pupils became suddenly and widely dilated. His condition was the most alarming that I ever witnessed, and nothing but the instant recognition of the danger and the immediate resort to strychnine and artificial respiration, etc., saved the patient's life.

The pupil, I believe, is the most reliable single indication, and, as a rule, neither the heart nor the respiration will be materially affected before a distinct and appreciable impression is made upon the pupil. The pupil is controlled by the third-nerve center in the aqueduct of Sylvius. As the patient goes under the anesthetic certain changes may always be noted in the pupil. At first it dilates slightly from the sensory impression on the cerebrum, just as momentary dilatation may be produced by the inhalation of any pungent vapor or by emotion. In the second, or surgical stage, when the cerebrum is paralyzed and no longer appreciates sensory impressions, the pupil is contracted, because the third-nerve center is still active. If now the anesthetic is pushed still further and this center is paralyzed, dilatation of the pupil results. By the time this occurs an embarrassment of the respiration may be noted, and a weakened heart action and a pallor or cyanosis of the face. Then comes the tug of war. But the patient should not be allowed to reach this point if strict attention to business and a careful watch for danger signals can prevent it. A pupil contracted and responsive to light is the limit beyond which it is not only not necessary, but extremely dangerous, to go. It is needless to add that digitalis and strychnine should always be on hand, and at hand in case of accident.

I have several times noted among physicians an unwillingness very much akin to fear to administer chloroform. I have seen some decline to give it, and I have seen others give it who certainly did not understand it, and there are others who will indulge in the wildest talk about the awful dangers of chloroform and express themselves as opposed to its use in almost any circumstances. Such fears and ideas are unreasonable, and if doctors generally were better acquainted with the details of chloroform administration, as they should be, there would be less of such prejudice.

One word in closing about the ACE mixture, and that is a word of warning. Whatever theoretical considerations are responsible for its existence and use break down under the brute force of practical results. The death-rate from this mixture is about the same as that from chloroform. The mixture is usually administered in a towel and paper cone, after the manner of ether, and after a few minutes inhalation the ether is evaporated and the patient is breathing a strong vapor of chloroform in a closed space with an insufficient supply of air. The composition of this mixture lulls the anesthetizer into the false belief that the patient is breathing a vapor with a constant proportion of one part alcohol, two of chloroform, and three of ether. This ratio does not exist in the vapor of this mixture. Similarly with any mixture of chloroform or ether. These drugs when put together do not produce a new chemical compound, as is sometimes claimed by advocates of the ACE mixture, but they remain a simple mixture, and each part evaporates in its own time. If this mixture is to be used at all, it should be administered with all the care of chloroform, because the ether in it is rapidly dissipated, and in the end we practically get a chloroform anesthesia.

I have endeavored in this paper to show that for the general purposes of anesthesia ether should be employed in preference to chloroform; that chloroform, however, is indispensable in its place; that it is the duty of every physician to know how to administer it properly, and that if given carefully by a person duly watchful of his patient's condition the danger from it is reduced to a minimum; that the ACE mixture has no advantage over chloroform or ether, but is more dangerous than either, and that if used at all it should be administered as chloroform.

ON THE DEFINITION OF HYPNOSIS.[*]

BY DR. MAX HIRSCH,
BERLIN.

To unite an idea with a word is as old as our language. New words are only formed whenever it becomes necessary to agree on an exact term for an unknown idea. This should be especially so in science. If in this connection we consider the word "hypnosis," we should think that a state is meant showing a relation to normal sleep (ὑπνος). Against that, Bernheim, one of the founders of this healing method, asserts *Hypnosis exists without sleep;* with that he will express, that a number of so-called hypnotic phenomena can be produced on some persons when awake.

In my text-book[†] I proposed, in order to prevent a confusion of ideas which from this has to result with certainty, to call that condition in which an individuum has taken a suggestion when waking and conscious captivation. To what would it lead if we should consider every man hypnotized who has taken a suggestion? Yet such a nonsense seems to become usage in our language. Frequently we read in journals, novels, etc., this or that man was completely hypnotized instead of "fascinated," which was formerly used.

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[*] Translated from *Deutsche Medicinal Zeitung*, 91, 1895, by Dr. Otto Lerch, New Orleans.

[†] *Suggestion und Hypnose*, Leipzig, 1893.—Abel.

What is meant then by hypnosis? What are the characteristic signs of this condition? If these questions could be answered shortly and precisely a great service would be rendered to the suggestion therapy, and the following discussion would be superfluous. Such an answer, however, is impossible to give. On reading the various definitions of the authors one cannot help but feel that they mostly try with complicated phrases to get around a clear and simple definition, and at the same time one becomes conscious of knowing less of the hypnotic state than before. The reason for the boundless confusion and unclearness is, in my opinion, solely due to the fact that it has been tried to call a number of various conditions, which have nothing or little to do with each other, by one collective name. After it was once discovered that in the hypnotic state at one time a certain symptom and then again another symptom became apparent, one was forced to divide the state in various degrees. A condition in which the hypnotized took but a few suggestions was considered to be a light degree, and that in which all symptoms of hypnosis were present was called a deep hypnosis. Various marks of distinction were given to be characteristic for each degree. Krafft-Ebing notices two, Ford and Charcot three, Liébault five, Bernheim nine degrees of hypnosis. One author sees the mark of distinction in the power to open or shut the eyes; another in the present or absent amnesia, etc. Mostly it is spoken of as a light or a deep sleep, and it is far too little considered by the authors that but in a few cases sleep comes in question at all.

What I think of the hypnotic condition after an experience gained from thousands of practical experiments, I wish here to state in short: In my opinion *hypnosis as an independent state does not exist,* and it would be desirable to strike this word entirely, which has caused so much trouble, and has made the suggestion therapy so many enemies. However, this is hardly possible at present, and it is therefore necessary to see what the state of hypnosis really is.

First, there are a number of persons who, upon the sleep suggestion thought to produce hypnosis, do not sleep, and tell this to the physicians. The expert will then either try further experiments to have the suggestions accepted, or he will be satisfied with a state of calmness of mind (*Gemucth sberuhigung*) with eyes closed, in which condition by far the most therapeutic suggestions can be brought to act. It is especially easy to produce with suggestion euphoria, at least a melioration of humor as well as to free from pain, and that frequently in cases in which a corresponding suggestion without a previous calming of mind and without eye-shutting had been in fruit unsuccessful. With this, quite a large number of cases are settled in which the authors speak of hypnosis. Many use exclusively this condition for therapeutic purposes. Professor Hirt, for instance, declares that for therapeutic use this state is sufficient and that his patients are never brought into any other. I too have found this condition in many cases entirely sufficient in suggestive treatment; was, however, always conscious that hereby a hypnotic therapy could not be spoken of. As a proper name for this special state of hypnosis, I would suggest a term which occasionally has been used in literature synonymously with hypnosis: "Passive rest of Mind." Of nothing else can be the question in this condition. The theory how in such cases the heightened suggestibility is to be explained cannot be treated of in this paper. That it is present and that it explains the acceptation of many suggestions, and therefore, the useful application of this condition in suggestion therapy cannot be doubted. According to my calculations, which however do not pretend to be exact, a sleep suggestion will produce only this state in about twenty-five per cent. of men.

Contrary to this condition in which the acceptation of the sleep suggestion is not produced, is that state in which that suggestion is accepted. The persons come in consequence of the sleep suggestion to sleep illusion. This state can be produced in the majority of men, about sixty per cent. The attention becomes fixed on the idea of sleep upon which it is concentrated during that state.

Through this averting of attention the control of brain activity is diminished so that suggestions are readily accepted. Mobility, sensibility, and common sensation are especially influenced.

almost by all persons who are in the state of sleep illusion. Rarely, and then only in a small degree, the sensorial sphere. How different, however, is this state from the foregoing (passive rest of mind), and yet it is called, like that, hypnosis. In consequence one has to speak in such a case of a second degree of hypnosis, as in this condition more suggestions are accepted, and most of all the suggestion of sleep. This does not mean, however, that the persons actually sleep. The acceptation of the suggestion of sleep takes place in a waking condition. The persons are and remain awake and keep their normal consciousness.

What, then, is the state in which one can put a person in all possible positions, influence their memory, attack the consciousness of their very self (seh-Bewuntsein), and after which a spontaneous amnesia exists for everything experienced in that condition. The authors assure us "*that is the deepest degree of hypnosis; that is hypnosis.*" Nay, that is not hypnosis at all, that is sleep, the same sleep these persons sleep at night. Of course it is a peculiar sleep. One can converse with these persons during their night sleep as well, and they accept all possible suggestions during that sleep. This sleep has been produced with suggestion, just so as these persons, where and when they wish, can produce it, whenever they have the mere intention to sleep. It is the same, however, whether I give the suggestion of intention to sleep to a person, or whether that person takes that intention without my suggestion. After all, each suggestion has to be followed by auto-suggestion before it can act. I have spoken about this sleep, which I have called "somnambulic sleep" (somnambuler schlaf), after having had occasion to make this remarkable observation on a number of persons, in another paper, to which I hereby refer.*

What has this condition, which we find in about 10 per cent. of men, in common with that previously discussed? This state is something peculiar; it represents a changed position of consciousness (veraenderte Bewusstscinslage), opposite the waking condition. The only thing that state 1 and state 2 have in common is their production through sleep suggestion, whereas all three states participate equally only in the heightening of suggestibility; though

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*Neber Schlaf, Hypnox und Somnambulismus, *Deutsche Med. Wachenschrift*, 36, 95.

one might perhaps add the external similarity, rest position with shut eyes, but even this mark can be changed through suggestion. It remains, then, only to remark that a relatively small percentage of men, about five per cent., cannot be influenced at all through sleep or calming suggestion. In that case it is said that these persons cannot be hypnotized. Many authors have not considered the first state as hypnosis, which seems reasonable enough. These have given the percentage of persons not to be hypnotized to be 20 to 30 per cent., whereas others, in opposition to this, have maintained that only five per cent. cannot be hypnotized, due to the fact that they have regarded the first state (passive rest of mind) as a degree of hypnosis, and by no means due to their greater ability to produce hypnosis.

If we consider all that is said above, we find that the first degree is nothing but an artificial calming of mind; the second degree, the belief to sleep, acquired in the waking condition; the third degree, however, a peculiar sleep.

What, then, is hypnosis? It seems to me that it was the third degree that has caused the study of the remarkable phenomena, as "the magnetiseurs" could produce their interesting experiments only on persons in this state, and these persons were called media. Not knowing that this condition was a mere species of sleep, it was called with a new name, hypnosis. Later, this term was extended to cover all the conditions above discussed, which were thought to be lighter degrees of hypnosis. We have seen that this view is untenable, further shown by the fact that the first two degrees can never be converted into the third one.

Finally, the question arises, shall we, knowing how badly the new term has been selected, and for how many different conditions it is used, keep it, or dispense with it? As mentioned before, I would like to advocate to strike the word; yet I believe this will be, considering the present literature and the habit, almost impossible. I would suggest, however, to call the third degree, entirely different in principle, "*somnambul-hypnosis.*" When we, then, bear in mind that by hypnosis we have nothing but a heightened suggestibility, by mostly waking consciousness, the confusion will be less than it has been heretofore, and the nimbus attached to the word hypnotism will be greatly lessened if not destroyed.

PLACENTA PREVIA, AND REPORT OF CASES.

By JOHN R. SHANNON, A.B., M.D.,

Cabaniss, Ga.

Placenta previa being an abnormal situation of the placenta, the question naturally arises, what is the cause of this abnormal condition? Placenta previa may be partial or complete; that is, the placenta may cover only a portion of the internal os uteri, or it may entirely cover it. The cause of this abnormal situation of the placenta has been a fruitful theme for discussion. We do not propose to enter into a detailed discussion of the causes. We know that the symptom which first warns us is the sudden flow of blood, which usually manifests itself during the last months of pregnancy. The hemorrhage, though not always, generally coincides with the menstrual period. The best authorities say that if the flow of blood does not endanger the life of the mother or child, the treatment should be directed to carrying the woman to full time. We have had two cases, one partial, one complete, and our experience leads us to the conclusion that the best thing to do after being satisfied that we have a placental presentation to deal with, is to terminate the pregnancy at once, more especially if it is a complete presentation. We should in no event wait longer than seven months, because at that period there is some chance for the child's life. Should we hesitate longer than this period, the danger both to the mother and child is constant and increasing, because a fatal hemorrhage is liable to occur at any time, and perhaps when medical aid cannot be secured, or if secured, too late to do any good.

In the spring of 1895 we were consulted by Mr. A. in regard to the condition of his wife. He reported that she was about five or six months advanced, and at a period about corresponding to the "monthly time" she had hemorrhage, which however was slight. About the seventh month the hemorrhage was somewhat more profuse. We were sent for, and after careful examination, satisfied ourselves that we had a case of complete placental presentation to deal with. Now the problem for us was, what is best for the mother and child? Should we attempt to carry her to full time or terminate the pregnancy? Because of the slight hemorrhage, we decided on the former plan, with this injunction, and its great importance impressed on the mind of the husband, should the flow become excessive, send for me at once. She was taken with labor pains in the afternoon and we were sent for early the next morning. We, in company with Dr. ——, called to see her. She complained of being very dizzy—could not see any distance. She had a severe hemorrhage during the night. We made instrumental delivery, but the patient never rallied, and died in one and a half hours after delivery. The cause of her death must have been the excessive loss of blood.

Case number two was one of partial presentation. This terminated successfully at full time without material trouble.

Should we ever have another case of complete placental presentation, we shall certainly advise immediate termination of pregnancy, and place the responsibility of refusal upon the patient.

APPENDICITIS.

The question when to operate in appendicitis has always been a disputed one. Dr. Willy Meyer, of New York, says that in all cases of diffuse perforatvie appendicitis the operation must always be done at once. It is only exceptionally that patients recover without an operation. They have the best chance to recover if operated upon within the first twelve hours. In discussing acute appendicitis, he says the patients should always be carefully watched. If the pulse goes above 116 to 120, and has a tendency to stay there, this is an indication for an operation. In cases of doubt the operation is better than waiting.

In cases of subacute or mild attacks of appendicitis, also after the first severe attack, from which the patient recovers without immediate operation, the appendix should be removed. When the appendix has once been inflamed it must be regarded as a diseased organ, and one which is quite likely to give repeated, and more serious, even fatal, trouble in the future.—*Practical Medicine.*

SOCIETY REPORTS.

AMERICAN MEDICAL ASSOCIATION.

ATLANTA, GA., May 15, 1896.

The Forty-Seventh Annual Meeting of the Association was held in Atlanta, May 5th, 6th, 7th, and 8th. The Association assembled in DeGive's Opera House, May 5th, at 10 o'clock, and was called to order by the President, Dr. R. Beverly Cole, of California. After prayer by Dr. Henry McDonald, the Addresses of Welcome were delivered by Dr. Frank M. Ridley of LaGrange, and Hon. John Temple Graves of Atlanta.

Announcements were then made by the chairman of the Committee of Arrangements, Dr. Willis F. Westmoreland, after which the president delivered his address.

Dr. Cole stated that the American Medical Association had, within the past two years, brought about great changes in the desired direction of higher education. It must, however, be admitted that improvement had been effected but very slowly, and that the usage of many of the schools to evade the laws established by the Association is so general, that the good result is small, and the manifest reluctance of so many now within the organization to embrace the last advance, namely, the adoption of the four years' requirement, gives but little promise for the future. Just so long as the examinations for matriculation are conducted by members of the faculty of medical schools, just so long will evils continue; and so long as the professional examinations for degrees are conducted by interested parties, just so long will the ranks of the noblest profession be filled with uneducated, untrained, so-called doctors.

Another question of grave importance, and to which he thought the Association should take cognizance and suggest a remedy, was the total absence of reciprocity between the United States and foreign countries as to laws governing the right to practice. Why Americans should be required, when taking up their abode in Germany, Great Britain, and even in the territory of our first cousin, Canada, to undergo an examination preliminary to securing a license, while our portals are floodgates through which every country of the earth pours its surplus of medical men; or rather, to put it more correctly, why our country should receive with open arms, without hindrance, the excess of product of foreign schools without requiring of them the same as is required of us, he could not see, and he was distinctly of the opinion that the time had arrived when the matter should be earnestly considered and something done to arrest the strides of this rapidly growing wrong.

Equally gratifying is the effort now being made asking Congress for an additional member of the Cabinet, who shall be known as the Secretary of Public Health, and who shall be head of a department to be known as the Bureau of Health, which will have general charge of health matters as well as statistics. Such a department would be of incalculable utility and value, and the measure should by all means possible be vigorously pushed forward.

The Address on Medicine was delivered by Dr. William Osler, of Baltimore, upon

THE STUDY OF THE FEVERS OF THE SOUTH.

Humanity has but three great enemies: fever, famine, and war, of which by far the greatest, by far the most terrible, is fever. It is worthy of comment that three of the greatest benefits conferred on mankind, beside which it would be hard to name three of equal importance, have been in connection with the fevers, the introduction of cinchona, the discovery of vaccination, and the announcement of the principle of asepsis. The differentiation of special forms of the continued fevers, and particularly that of typhoid, forms one of the most interesting chapters in medicine.

It is a very gratifying sign to notice the attention which has been given of late to the subject of typhoid fever in the South. Some years ago a good many physicians resented the imputation that the disease, to any extent, prevailed in the Gulf States.

He had been in the habit for several years of reading the reports of the discussions on this subject at the New Orleans Parish Medical Society, and they have been interesting as showing a progressive development of knowledge such as comes to all of us with fuller study of any problem. Enteric fever presents no constant picture. On the contrary, scarcely any disease has a more varied symptomatology. The fever may be said to be invariable, though afebrile cases are not unknown; but in the features of onset, in the length of its course, in the presence or absence of symptoms regarded as cardinal, such as rose spots, diarrhea and splenic enlargement, typhoid fever is so uncertain that the diagnosis is often dubious.

Advances in the treatment of fevers, and especially of typhoid, have not kept pace with the rapid progress in our knowledge of the etiology. Think of the misery, the tediousness, the discomfort of a typhoid case with three relapses; think of the bleeding, the blistering, the purging, from which at least our fever patients of to-day are free. Contrast with the former methods the care, the gentle nursing, the scrupulous cleanliness, the abundance of cold water to drink, and fresh air which typhoid fever patients of to-day receive.

Full clinical histories should be *first* furnished of typhoid fever cases, and any one who wishes to contribute to the subject should not be too busy, not only to make a careful, critical study of the symptoms, but to jot them down in some order so that at least they may be intelligible to others. The *second* point is the necessity of obtaining autopsies in fatal cases. We all appreciate how difficult this is in private practice, but in determining the nature of obscure typical cases of fever it is absolutely essential. There is not a hospital in the country in which the determination of the nature of an obscure case of fever is not settled by the autopsy alone. *Thirdly,* it is essential that observers who undertake to study this question with thoroughness should approach it with a full acquaintance with the varieties of the malarial parasites, and with an accurate knowledge of the bacteriological technic.

To us, as a profession, belongs the chief glory of the century. Enormous as has been the advancement in material prosperity, and widespread as has been the diffusion of benefits from the development of the physical sciences, they cannot compare with the progress which has been made in the relief of suffering and in the prevention of disease. Our work here ranks among the most memorable achievements in the history of the race. Fever in its various forms is still with us, and the century has seen in connection with it but one discovery of the first magnitude, but it is almost of equal importance to know that the way has been opened, and that the united efforts of many workers in many lands are day by day disarming this great enemy of the race.

Dr. Nicholas Senn, of Chicago, delivered the Address on Surgery, choosing for his subject

SOME OF THE LIMITS OF THE ART OF SURGERY.

Modern surgery has attained a degree of development which entitles it to the distinction of a science and an art. As a science, surgery is of recent date, having been founded and perfected during the last half of the present century. As an art it has been practiced for centuries by our ancestors, with credit to themselves and benefit to the injured, the crippled, and the sick. When Boyer wrote the introduction to his classic work on surgery, he expressed the conviction that surgery had reached perfection. How little did he dream of the great changes that would be wrought in the practice of his cherished profession by the progressive pathologists and surgeons of the next few generations.

The *furor operativus* manifested in special departments of surgery, and its obvious results, render the standing and legitimate scope of the general surgeon very uncertain and indefinite at the present time. Let the general surgeon turn to the right or to the left, advance or retreat, and he finds himself on reserved territory. As for the physician, he is expected to answer night calls, prescribe for diarrhea and whooping-cough, watch cases of typhoid fever, measles, scarlatina and smallpox, and should complications arise, and he does not report to the proper authority, he renders himself liable to censure. Much of this ill-applied energy in the surgical world has resulted in detriment to patients and in retarding actual surgical progress. Operative surgery has been carried to extremes.

Operative interference is absolutely indicated in fractures of the cranial vault under the following circumstances: (1) All open fractures, including gunshot and punctured fractures. (2) Depressed fractures, attended by well-defined symptoms, caused either by the depression or intracranial complications. (3) Rupture of the middle meningeal artery, with or without fracture of the skull. The indiscriminate use of the chisel and the trephine in the hands of the inexperienced practitioner is fraught with danger, and should not be encouraged by teachers and expert surgeons. Cerebral localization and aseptic surgery have made it possible to treat a few intracranial lesions successfully by direct operative interference.

The abdominal cavity was largely a *terra incognita* to the surgeon of less than half a century ago. To-day it is the favorite battleground of the average surgeon, and the select field of the so-called abdominal surgeon. Notwithstanding the wonderful improvements in the technic of operations upon the stomach, partial gastrectomy and pilorectomy have yielded anything but encouraging results. In nearly fifty per cent. the patients subjected to radical treatment for malignant disease of the stomach succumbed to the immediate effects of the operation. The speaker has opened the abdominal cavity for the surgical treatment of malignant disease of the stomach nineteen times, and only in one case did he find the disease limited to the organ first affected, and in this case the general health of the patient had been so much deteriorated by the obstructive pyloric carcinoma as to contraindicate radical operation; in all of the remaining cases a pylorectomy or partial gastrectomy was out of the question, as the carcinoma of the pylorus or stomach had extended to adjacent organs, or had given rise to regional infection through the lymphatic glands sufficiently to contraindicate any attempts at radical removal of the disease.

The greatest onslaught of modern surgery has been upon the organs of generation, male and female. The future historians who will record the work of many gynecologists belonging to the present generation will have reason to express their surprise at what disasters the art of surgery has produced when plied in cases far in advance of a scientific foundation. Here and there we hear a feeble voice protesting against the indiscriminate surgery upon the organs of generation of the opposite sex, but the mutilating work continues in spite of such opposition and well-meant advice. When we arraign the gynecologists before such a representative body, composed of the representative medical men of the country, for innumerable and inexcusable transgressions of the rules which ought to govern and control the art of surgery, we do not include the scientific, conscientious workers in that department of surgery, but our remarks apply to a class of routine operators which has recently grown to alarming dimensions, not only in this but in nearly every country penetrated by the dim rays of so-called bold surgery. The new generation of doctors finds no longer satisfaction in practicing their profession in some rural district. They have their eyes on large cities and have heard of enticing fees paid to specialists for insignificant operations. The recent graduate, or the man who has become disgusted with country practice, sees a much-employed gynecologist, follows his work for a month or two, and returns to his prospective field of labor a full-fledged specialist.

The frequency with which women are being castrated is one of the most flagrant transgressions of the limits of the art of surgery. It is not unusual for one operator to exhibit five or six normal ovaries as the result of half a day's work. All kinds of excuses are made for this kind of surgery. Where is this wholesale unsexing of our female population going to end? The beginning of the end has come. The army of women minus their essential organs of generation is beginning to raise its voice against such mutilating work. The number of women who willingly sacrificed their ovaries to restore their shattered health without securing the expected relief has increased to an alarming extent. This sad experience has made the gynecologists more desperate and bold. It is difficult to say where this rage for the removal of the female sexual organs will end, or what organ will be the next battle-ground for the aggressive gynecologists. The clitoris, the vagina, the cervix uteri, the ovaries, the Fallopian tubes, the uterus and its ligaments, have successively passed through a trying ordeal of operative furor. What the next fad will be it is impossible to foretell.

The address on State Medicine was delivered by George H. Rohe, M.D., of Baltimore, subject,

THE PURIFICATION OF WATER SUPPLIES.

The most vitally important sanitary problem confronting American municipalities at the present day is, unquestionably, the supply of pure water for drinking and other domestic purposes. The widespread prevalence of typhoid fever may be practically looked upon as a result of the pollution of the drinking water. The importance, therefore, of having the latter of a pure quality is self-evident. In 1894 twenty-five of the principal cities of the United States had an average typhoid mortality of 39.6 per one hundred thousand of their population.

Pure water, or water free from all sorts of uncleanness, is demanded to-day by the "sanitary conscience" of the public. We are therefore reduced to one of two alternatives: either to prevent the access of impurities to the sources of supply, or else to resort to some method of purification of the water itself. The city of New York has recently chosen the first alternative by purchasing large tracts of land bordering upon its source of water supply. By the removal of sources of pollution from the area of land so acquired the endeavor has been made to secure a pure drinking water. But the expense has been something enormous.

In sand filtration two processes must be kept in view: one, the straining out of the bacteria, and the other the conversion of the organic matter into inorganic compounds. These imply that the materials of which the filter is composed shall be sufficiently fine to hold back all suspended matter, and that a sufficient supply of oxygen shall always be present to oxidize it. In most natural waters there is a sufficiently large quantity of free oxygen present to cause the oxidizing processes to go on continually, but in extreme cases of pollution an extra supply of oxygen is necessary. This may be supplied by aëration of the water before filtration, or by conducting the filtration intermittently.

THE JENNER CENTENARY.

The character of Dr. Jenner and the history of his discovery of the protective value of vaccination were the subjects of the first address. In the absence of its author, Dr. N. S. Davis, the paper was read by Dr. Didama, of New York State. The paper recounted the well known facts concerning the life of Jenner and the manner of his great discovery, the story being told in an interesting way.

Dr. H. R. Storer, of Rhode Island, gave a list of the Jenner memorial medals, tablets, portraits, etc.

Dr. Geo. M. Sternberg, Surgeon-General United States Army, read a paper entitled, "Scientific Researches Relating to the Specific Infectious Agent of Smallpox and the Production of Artificial Immunity from this Disease."

Dr. Francis E. Martin, of Massachusetts, read an instructive paper on "The Propagation, Preservation, and Use of Vaccine Virus."

The closing address was delivered by Dr. Eugene Foster, of Augusta, Ga., entitled, "The Statistical Evidence of the Value of Vaccination to the Human Race."

The celebration was under the auspices of the American Medical Association and of the American Public Health Association.

SECTION ON SURGERY AND ANATOMY.

The Chairman, Dr. C. A. Wheaton, of St. Paul, in making the annual address, reviewed at some length the history of this section of the Association, and mentioned the names of many men who have been prominent in its work in years gone by. He deplored the fact that many of these men too often absent themselves from these meetings, as it deprived the section of their counsel and assistance, which is so absolutely essential to its success.

Dr. Cark Beck read a paper on "Subphrenic Abscess in its Relation to Pyothorax." He stated that of five cases of subphrenic abscess, which he had observed, only twice was he able to make a correct diagnosis before operation. The fact that subphrenic abscess is very often confounded with pyothorax is well known, and such errors impress one gravely with the necessity of widening his limited diagnostic knowledge upon the subject. In referring to the treatment, the author stated: "The history is the most important guide in differentiation. In subphrenic abscess there is generally a history of a previous abdominal disturbance. There is no history of cough and expectoration as in pyothorax. The heart is little, if at all, displaced, and there is no ectasy of the thorax or of the intercostal spaces. In the lungs vesicular breathing is found below the clavicle; the pectoral fremitus is also clearly perceptible. There is a well-marked limit to the region of vesicular breathing below which the expiration murmur is replaced by amphoric sounds. Deep inspiration pushes the boundary line of the vesicular breathing much further down into areas in which formerly no respiratory murmur could be perceived. This would indicate a well-marked separation between the lungs and the abscess cavity, the boundary line of the lungs protruding towards the abscess cavity during deep inspiration. It is sometimes impossible to distinguish an encysted pyothorax from a subphrenic abscess. The pathognomonic signs of such effusions urged by Leyden were absence of cough and expectoration, slight displacement of the heart and rapid change of note if the patient is rapidly turned. According to the author's observations, however, pleuritic effusion, particularly pyothorax, sometimes occurs without these symptoms."

Dr. Alexander Hugh Ferguson, of Chicago, read a paper upon "Thoracoplasty in America (Schede's) and Visceral Pleurectomy, with Report of Cases." Thoracoplasty, as first done by Schede, is an heroic measure for the otherwise hopeless cases of chronic empyema, and consists of the removal of the chest wall. Dr Ferguson described his method of operating, and stated that some cases are not cured in spite of any operation performed for their relief. In his opinion, the fact that any amyloid degeneration and tuberculosis does not contraindicate this operation, as stated by Schede, is only true within certain limits. The author first performed Schede's operation in July, 1895, in which case a good result was obtained. Healing by first intention was secured, and the patient was able to be out in a very short time. In spite of careful treatment for five months after the operation, owing to the fact that a long central sinus had not closed, the operation of visceral pleurectomy was performed, which resulted in the patient's complete restoration to health. This operation has been performed by several men in America since it was first instituted in this country in October, 1893, by Dr. Geo. R. Fowler, of Brooklyn.

Dr. Howard Kelly, of Baltimore, made some remarks concerning his method of treating Extrauterine Pregnancy.

He spoke of several causes for error in the diagnosis and treatment of this affection, and mentioned that he had mistaken for extrauterine pregnancies dermoid cysts, pelvic abscesses, and small ovarian cysts, all of which he evacuated through the vagina. In his opinion, it is rarely necessary to open the abdomen for this purpose.

"Cholelithiasis and Cholelithotomy," by Dr. Charles H. Dunn, of Minneapolis. This paper was based upon a study of forty cases of gall-stone disease and a review of the chief literature upon the subject. In the author's opinion the indications for the operation of cholelithotomy were imperative.

Dr. Donald McLean agreed with Dr. Dunn, and stated that a successful operation on the gall-bladder gave gratifying results.

Dr. A. H. Ferguson, of Chicago, considered that the most important question was when to operate. When the gall-bladder was found enlarged so that apparently there was a tumor present, an operation should be performed.

Dr. W. J. Mayo, of Rochester, Minn., read a paper entitled "Some Mechanical Causes of Interference with the Action of the Stomach and their Surgical Relief." He divided the subject into two classes: *First,* those which act from within the cavity of the stomach or its immediate connections, such as a tumor, cicatrix, or a foreign body which may obstruct its inlet or its outlet, or prevent its normal muscular action; and, *second,* those which act from without the stomach and interfere either by pressure or adhesion, obstructing its inlet or outlet, or fixing some portion of its wall, thus preventing its functions. The main diagnostic resources are the physical examination, the distention with air, and the test-meal. The author advises Fenger's oblique lateral incision through the abdominal walls, in order to perform gastrotomy, for the purpose of retrograde dilatation; Witzel's method for temporary purposes, and Frank's spout method for permanent feeding.

Dr. W. P. Nicolson, of Atlanta, read a paper on "Ligation of the External Carotid Artery." This operation was done in conjunction with exsection of the jaws and of the inoperable diseases of the same.

Dr. M. M. Johnson, of Hartford, Conn., read a paper on the "Technique of Removing the Appendix Vermiformis." One hundred cases were reported. The author described the method of preparing the patient for the operation, which he is in the habit of employing in these operations. He strongly advised as little manipulation as possible of the intestines. In chronic recurrent cases he makes an incision 1½ inches long directly over the appendix, and when the peritoneum is reached a catgut suture is passed through it at the upper angle of the incision so as to prevent its retraction. In finding the appendix he passes the thumb and index finger through the incision, seizes the colon, which he draws through the incision until the appendix is brought into view. When the cecum is surrounded with a pus sac, a perforated and sloughing appendix is usually found and should be removed. It should be a fixed rule never to close the incision without finding and removing the appendix. The treatment of the stump resolves itself into the treatment of an intestinal perforation and the surgical rule for the treatment of this condition should not be violated in the treatment of the stump.

With regard to the time for operation, this should be decided from the standpoint of the best interests and safety of the patient. In the author's opinion, operative measures should be an early consideration rather than a last resort. Of 100 operations performed by Dr. Johnson, 98 resulted in recovery and 2 in death, of which 64 were males and 36 females.

Dr. Parker, of New Orleans, could not agree with the author as to the advisability of removing the appendix at all times. In those cases where the appendix is surrounded by an abscess, all that is necessary is to open the abscess and drain the region.

Dr. A. H. Ferguson said the most favorable time to operate was between the attacks, and he believes it dangerous to operate during the acme of the inflammation. The best way of draining these cases is with gauze and a glass tube.

Dr. Hunter P. Cooper, of Atlanta, read a paper entitled "Gastrostomy for Stricture of Esophagus—Sbanijeu-Frank Method," and exhibited the patient. He related the history of a young man who, one year ago, took one swallow of pure nitric acid by mistake, causing corrosion of the entire mouth, lips, and esophagus. The mouth and lips healed about three weeks after the slough separated. The author first saw the patient in January, 1896, and several months previous to this an increased difficulty in swallowing was experienced, but at this time this symptom was considerably worse, and the feeling existed that small particles of food were stopped before reaching the stomach, evidently low down in the esophagus. Liquids could be swallowed slowly and with difficulty, half an hour being occupied in drinking a glass of milk. Examination of the esophagus revealed three strictures, seven, seven and a half, and eight inches from the edge of the incisor teeth. No more were discovered until the instrument was passed thirteen and a half inches, when an obstruction was met with, which would not allow any instrument to pass. The largest instrument that would pass the stricture seven inches from the teeth was of the size of a 22-French urethral bougie, and nothing would pass lower than thirteen and a half inches. Gastrostomy was decided upon and the Sbanijeu-Frank method was selected, which the author briefly described. The advantage of this method is that it brings the stomach through the abdominal wall in an oblique direction, and a part of the stomach is included between the edge of the costal cartilage and the skin, forming a valve. This device prevents leakage of the contents of the stomach during digestion and is a great advantage over the old method of making a direct communication between the stomach and the abdominal incision. The subsequent history of the case was uneventful, the patient gaining in flesh and strength and being perfectly nourished by means of feeding through the artificial opening.

Dr. F. W. Epley, of New Richmond, Wis., read a paper on "Skin Surgery," in which he mentioned a case, having transferred 52 square inches of skin in six large pieces from five different persons, and 300 smaller grafts from four other persons, to repair an injury to a man's foot, all of which were successful. After a brief description of the method employed, he laid especial stress upon the necessity of using antiseptics freely, cocainizing fearlessly, and making the donor's wound boat-shaped.

Dr. Z. J. Lusk, of Warsaw, N. Y., mentioned a number of cases of skin-grafting, and stated that he had employed two methods in the work. The first method was that of raising epidermis by cantharides, and the second was the employment, after proper softening and sterilization, of exfoliated epithelium. In all cases in which these methods had been employed excellent results were obtained.

SECTION ON DISEASES OF CHILDREN.

The Chairman, Dr. A. C. Cotton, of Chicago, read an address entitled, "Has the Milk Laboratory Come to Stay?" The speaker had been guided somewhat in the selection of his subject by the recent interest taken in the elaboration of infant food. There are three defined classes of infant feeders: (1) Those who regard the infant as belonging to the carnivora; (2) those who would place the nursling of the human species among the granivora, and (3) those who early place the young in the omnivorous class. Says one theorist, "Raw milk is poison"; another, "Bottled milk is indigestible"; another, "Starch is indigestible," and still another, "Cereals are unnatural." The speaker believes that the milk laboratory has come to stay. The advantages lie in the direction of more exact manipulation, greater precision and accuracy in the keeping of records.

Dr. J. A. Larrabee, of Louisville, followed with a paper on "Pediatric Therapeutics as Proven by Experience." He said widely different effects may be obtained from the same drug in different doses. In children the best are usually to be obtained from small doses, frequently repeated. In the discovery of new remedies we have been more successful reasoning by synthesis than by analysis. The author condemned the use of polypharmic compounds, emphasizing the importance of the use of simple prescriptions.

He believes the use of antiseptics good practice. Thus, he has obtained good results with listerine and borolyptol in infants with lactic acid fermentation in the stomach, as well as in children with putrefactive changes in intestinal ingesta, after removal of ingesta by enema and purgation. Guaiacol has proven to be the ideal intestinal antiseptic.

Dr. Elmer Lee, of Chicago, read a paper in which he followed quite closely the statistics and arguments of Dr. Winters, of New York, in opposing the use of antitoxin. Horse-serum poisoned by germ culture has no natural place in the human blood. The red blood corpuscles are dissolved whenever horse-serum comes in contact with them.

Dr. J. W. Stickler, of Orange, N. J., concluded from his experience that when the heart's action is fairly good, when the system has not been seriously impaired, when the urine shows little or no albumin, antitoxin, judiciously used, is likely to benefit the patient, but when there is great depression of the vital forces it is contraindicated.

Dr. Henry E. Tuley, of Louisville, read a paper on "Sepsis of the Newborn." In this he included the report of a case in which the mother, who was a healthy woman, had been in a well-appointed hospital and under the supervision of competent physicians and trained nurses for several weeks before confinement. The latter was normal and followed by an uneventful recovery. The child was healthy until an infection occurred at the umbilicus in spite of the most carefully conducted dressings which were applied. The author made the suggestion that this case should not lead any obstetrician to relax his careful use of aseptic dressing of the cord.

The subject of "Chorea" was introduced by a paper by Dr. Henry Hatch, of Quincy, Ill. He believed the nervous affection was directly due, in the majority of cases, to the modern faulty methods of rearing and educating girls especially. He suggested a modified rest treatment, combined with tonics, such as rapidly increasing doses of strychnia.

SECTION ON NEUROLOGY AND MEDICAL JURISPRUDENCE.

Dr. T. D. Crothers, of Hartford, Conn., the Chairman of the Section, presented the usual address, in which he commented upon the growing importance of neurology, and the legal relations and possibilities constantly growing out of present conditions, and spoke of the numerous publications on this subject during the past year. The present treatment of crime, insanity, and drug manias by legal methods has not kept pace with the march of science, so that it is no wonder that expert testimony has fallen into disrepute.

Dr. J. T. Searcy, of Tuscaloosa, Ala., read a paper entitled "Intoxication and Insanity." He limited the meaning of the word to the injurious effects on the cerebrum of toxic agents present in the circulation, the symptoms of intoxication being those that belong to the brain, this organ being exceedingly sensitive to the action of certain agents. Cerebral intoxication arises in the person according to the character of the agent and the particular brain; that is, according to the toxin and according to the abnormality of the particular brain.

Dr. G. W. Drake, of Chattanooga, read an article entitled "Man's brain and Mind: The Former Sometimes Insane, the Latter Never." The author held that a sane brain is one in which all its cells and cell derivatives are in a normal state chemically, physically, and vitally. The mind is never insane. Its brain machine may break down and need adjusting, but the mind cannot be injured by traumatism, auto-intoxication, or bacterial toxins.

A paper entitled "A Note on the Patho-Mental Effects of Degenerative Habit" was read by Dr. H. S. Drayton, of New York City, in which he referred to Maudsley's statement that a man is "by no means hopelessly chained down by the weight of his inheritance, for there is something else that makes fate, and that is education." Habits, however acquired, produce in time conditions of mind and body which of themselves reflect a healthful or injurious nature.

Dr. F. Peterson, of New York, read an article on the "Medical and Surgical Treatment of Epilepsy," in which he summarized his remarks as follows:

1. In about 1 per cent. of all cases of epilepsy an injury to the head will be found to be the original cause.

2. In a much larger percentage, an old meningeal hemorrhage, congenital or acquired in infancy, giving rise, in addition to the epilepsy, to various degrees of paralysis, idiocy, or other cerebral symptoms, and presenting on examination atrophic, sclerotic, or cystic sequelæ to the primary lesion, will be found to be the cause.

3. Cases due to the meningeal hemorrhage should not be operated upon.

4. In the very small number of cases having injury to the head as a cause, the epileptic habit is so strong and the changes in the brain usually so old and so deep-seated that operation does not cure and only seldom permanently diminishes the frequency of attacks.

5. Of miscellaneous traumatic cases where surgical procedure seems justifiable and is undertaken, a cure may be reasonably expected in perhaps four out of every hundred cases operated upon.

6. The removal of a cicatrix from the cortex supposed to be the epilepto-genetic nidus will naturally be followed by the formation of a new cicatrix in the surgical wound.

7. If a hundred cases of epilepsy could be selected in which the trauma dates but a few months back, trephining and ablation of the morbid tissues would doubtless prove curative in a very large percentage of cases.

Dr. T. O. Powell, of Milledgeville, Ga., read a paper on "The Increase of Insanity and Tuberculosis in the South." He said the negroes of Georgia and the South in general, up to 1860, enjoyed remarkable mental and physical health, and were almost entirely exempt from certain diseases, owing to the care of their owners and the hygienic precautions taken by the latter. In 1860 there were only forty-four insane negroes in the State of Georgia, the majority of whom had white blood in them. In 1870 there were 129 insane negroes in the State, in 1880 411 insane negroes, and in 1890 910 insane negroes in a population of 858,815, or one colored insane to every 943 of population.

Dr. John Punton, of Kansas City, Mo., read a paper on "The Etiology and Prophylaxis of Functional Nervous Diseases," in which he referred to the advance in our knowledge of the anatomy and physiology of the nervous system. Every practitioner recognizes that nervous diseases are increasing at a marvelous rate. The duty of the physician is to use all possible means to secure the needed rest for all morbid conditions of the nervous system, in which nervous irritability and nervous instability are the chief clinical criteria.

Dr. A. C. Corr, of Carlinville, Ill., read a paper entitled "The

Medical Aspects of Crime." The brain and the nervous system are the physiological organs of the mind and intellectuality, and every grouping of ideational activity has its origin in the functional activity of brain and nerve cells. In order to lessen crime we must cultivate and develop the moral sense and repress the emotions. Children should be taught as early as pssible that there is a principle of right and justice in the abstract, irrespective of any mere religious sentiment. The moral defect, with its criminal tendencies, is always congenital, often hereditary, and always modified in a greater or less degree by environment and synergistic influences.

"The Physician and the Criminal." A paper was read on this subject by Dr. J. B. Ransom, of Clinton, N. Y. The author commented upon the dearth of records as to the study of criminal man. The alarming ascendancy of crime should excite society to vigorous effort. The modern trial, sentence, and punishment have failed. The procedures of the courts and administration of law are based upon the theory that crime must first be detected and then punished, losing sight of the fact that men are not alike, and that punitive measures should be adapted to the individual characteristics of the criminal. He estimates that 25 per cent. of all criminals would show disease of the heart or of the great blood-vessels. Meningitis is also a prolific cause of crime.

Dr. D. R. Brower urged the profession to enlist in a crusade for the more rational treatment of crime. He favorably commented upon the custom of indeterminate sentences, whereby the criminal was induced to improve by the prospect of release added to the fear of continued imprisonment.

SECTION ON OBSTETRICS AND DISEASES OF WOMEN.

The meeting was called to order by the Chairman, Dr. Joseph Taber Johnson, of Washington, D. C., who read an address upon the "Recent Progress in Obstetrics and the Diseases of Women." He first considered puerperal infection, its causation and treatment, saying that this form of infection had been the cause of much discussion during the year. While something has been added to scientific knowledge of the history and behavior of certain pathogenic germs, the general course of treatment of these cases has been simplified and shortened. In the treatment the best instrument is the index finger, with which portions of after-birth or membranes can be removed, using, if necessary, bimanual pressure under ether. As regards hysterectomy for puerperal infection, it seems to be gaining ground, notwithstanding the opposition of Lusk, Price, and a number of other prominent men in this country and abroad, though the cases where it is indicated seem to be very few. The next subject considered was placenta previa. Nothing new seems to have been added during the year, except the suggestion that hysterectomy be done for the control of the hemorrhage. The diagnosis is generally not made until the occurrence of the latter.

Dr. Henry P. Newman, of Chicago, read a paper entitled "A Note on Stenosis of the Cervix as a Factor in Uterine Disease." He said that twenty years ago this subject was one of the topics of great interest among gynecologists. The literature abounded with learned and exhaustive treatises upon the pathology and treatment of the affection. Notwithstanding the amount of literature formerly written upon this subject, the hundreds of operations recorded by older gynecologists, and the nicely adapted instruments that remain as evidences of the reality of stenosis of the uterine cervix, there are some modern authorities who deny the existence of this affection as an anatomical fact. Stenosis was defined as a narrowing of the caliber of the canal, and may be situated at the external os, the internal os, or may include the whole extent of the canal. This condition causes sterility and dysmenorrhea by offering a mechanical obstruction to the entrance of the fecundating element, and by preventing the free discharge of the menstrual fluid.

Dr. I. S. Stone, of Washington, D. C., read a paper entitled, "How to Remove Pus Tubes without Rupture." He illustrated the method by exhibiting a diagram showing the application of clamps to uterine and ovarian vessels before enucleation from the anterior surface of the abscess wall. He summarized the application of this method as follows: It gives more space for careful enucleation. The larger blood supply is tied off before enucleation begins, and no severe hemorrhage can occur during or after the operation. Smaller silk or catgut can be employed, as no *en* *masse* ligatures are used. If rupture is avoided, there is no need of flushing or drainage. It facilitates enucleation by affording another point of cleavage, namely, from anterior surface of the pus sac. It facilitates exsection of the uterine cornua. Dr. Stone exhibited a huge pyosalpinx, nearly nine inches in circumference and fourteen inches in length, which he had recently removed after the manner described in his paper.

Dr. W. G. MacDonald, of Albany, read a paper upon "The Present Status of Ectopic Pregnancy—a Surgical Disease." He said the surgery of ectopic pregnancy is mature rather than old. The pathology and principles of treatment are already established. Yet women are dying every day from ruptured ectopic pregnancy with no effort being made to rescue them because the condition is not recognized during life. Diagnosis only follows careful study of the clinical history and painstaking physical examination. There are two general propositions which should be generally appreciated in the diagnosis of ectopic pregnancy. *First,* any woman who, during her child-bearing period, presents herself with symptoms of disease of the organs of generation, of recent origin, either new or entirely different from those heretofore experienced, if associated with any of the early symptoms of pregnancy, demands at once a careful examination. *Second,* abdominal pain, either continuous or intermittent, is always an important symptom and requires the fullest investigation.

The treatment of ectopic pregnancy is surgical. Operation is to be undertaken as soon as a diagnosis is established. Many cases are emergency surgery, and require immediate operation. Complete tubal abortion, if diagnosticated, will seldom call for surgical intervention.

Dr. Joseph Price, of Philadelphia, followed with a paper entitled "Symptoms, Diagnosis, and Time for Operation in Ruptured Tubal Pregnancy." He said that the occurrence of tubal pregnancy is regarded in widely different lights by the theorist and the surgeon who has learned to deal with it practically, and who has accordingly come to understand the manifold directions in which speedy disaster may swoop down upon unfortunate women subjected to this calamity. As to the causes of aberrant gestation, we are to consider them both as anatomical and moral. Causation can rarely be determined with certainty. There are many agencies which operate to produce the trouble. The character of the attack, the whereabouts of the patient, her employment, are always interesting considerations. Dr. Price is convinced, fortified by his own experience, counting now 128 cases with five deaths, that the operative treatment is the only one to be considered. He is fully satisfied that these pregnancies are rarely in the broad ligament. He regards hemorrhage as the chief danger of the operation.

Dr. Milo B. Ward, of Topeka, Kansas, read a paper entitled "Gauze as Drainage in Abdominal and Pelvic Surgery." He said it was idle to say that drainage is needed only when the work has been carelessly done. However perfect the technique may be, it is still a fact that there are cases whose recovery depends entirely on the drainage employed after the surgical toilet is made. The author urged the importance of the thorough use of gauze in a large variety of complications, believing it to be the material which met the most indications.

Dr. Howard A. Kelly no longer drains in cases of tubercular peritonitis, and the cases practically all recover. The cases that he drains usually have fistulous tracts. When he does drain he uses gauze.

Dr. Charles P. Noble, of Philadelphia, said the more he operates the less he drains. At the present time he drains but little. When he uses gauze for drainage purposes he also uses a glass tube in addition to remove the fluid from the gauze, believing that gauze of itself does not drain.

Dr. H. O. Pantzer, of Indiana, said that the peritoneum was amply able to take charge of a limited amount of pus, when the affection of tissues was not too great. He thought gauze packing was unnecessary in a great many cases. He suggests the use of peroxide of hydrogen to loosen the gauze from its attachments where the gauze is used for drainage purposes.

Dr. A. P. Clarke, of Cambridge, Mass., read a paper entitled "Degenerative Changes that Occur in Uterine Fibro-myomatous Growths." The author begins by saying that the presence of uterine fibroid growths has for the past few years given rise to much discussion among gynecologists. The consideration of the surgical treatment which they have demanded has received much attention, and measures of procedure, in some instances apparently opposite, have sometimes been adopted. The success attending the removal of fibroid growths either by partial or by total hysterectomy has brought the subject of such neoplasms more prominently before the profession.

Aneurismal and also fatty degenerative changes were spoken of and discussed at some length. Another form which has a practical significance to the abdominal surgeon is that resulting from the occurrence of enormously enlarged vessels or capillaries. These vascular elements may develop at the expense of the connective and the muscular tissues. The several kinds of secondary transformations occurring in fibro-myomata are productive of further expulsive processes that often require only timely surgical interference as measures supplementary to the effecting of their complete removal.

"Drainage versus Radical Operation in Cases of Large Pelvic Abscess" was the title of a paper by Dr. Chas. P. Noble, of Philadelphia. He called attention to the value of drainage in the treatment of large pelvic abscesses, and contrasted the results which can be secured by this method of treatment with those which have been obtained by the more radical operation of abdominal section, together with the removal of pus sacs, whether of ovarian, tubal, or other origin. An ordinary case of pyosalpinx, or abscess of the ovary, chronic in character, was ruled out of consideration.

Until June 11, 1895, the author had never employed drainage without abdominal section in the treatment of this class of cases, but had always operated on them by abdominal section and the removal of the diseased parts. Since this period the speaker had operated upon eight cases without a death.

Dr. H. D. Thomason, of Albion, Mich., followed with a paper on "Some Suggestions in the Prophylaxis and Management of Puerperal Eclampsia." He first dwelt upon the pathology and etiology of puerperal eclampsia, saying that the etiology was still an unsettled question. As soon as he is satisfied of the viability of the child, he believes he is not only justified, but it is his duty to bring about premature labor, *first*, upon the ground of safety, welfare, and comfort of the mother; *second*, for the welfare and safety of the child.

"Intestinal Obstruction after Laparotomy" was the title of a paper by Dr. Henry O. Marcy, of Boston, in which, before entering into a general discussion of this subject, he gave a brief report of all the cases of intestinal obstruction following laparotomy which had come under his observation. He reported seven cases.

Dr. R. R. Kime, of Atlanta, read a paper entitled "Puerperal Infection; Its Pathology, Prevention, and Treatment." The author stated that prevention of puerperal infection is accomplished by strict asepsis in obstetric practice, as well as thoroughly emptying of uterus and securing proper contractions with repair of lacerations.

"Gonorrhea in the Puerperium," by Dr. A. H. Burr, of Chicago. In an obstetrical experience of 500 cases the author has had three fatalities, each of which was directly traceable to gonorrhea. In many of the remaining cases of puerperal sepsis, more or less severe, he had found by clinical history or by microscopic verification, the presence of a gonorrheal infection.

Dr. Reuben Peterson, of Grand Rapids, Mich., read a paper on "Hysterectomy as an Accompaniment to Bilateral Removal of the Appendages." The author made a plea against the adoption of the universal rule in regard to these cases as if it were for all time settled. He claims that the surgeon has no right to remove the uterus after removal of the appendages unless he is convinced that the organ is diseased beyond the hope of cure by less radical methods.

SECTION ON THE PRACTICE OF MEDICINE.

The Chairman, Dr. Wm. E. Quine, of Chicago, read an address upon the "Advances in Therapeutics during the Year," in which he spoke of the therapeutic effects and *modus operandi* of bone marrow, and he was of opinion that the agent was of undoubted value in relation to the treatment of ordinary simple anemia and chlorosis, and in cases of anemia of the more intractable kind. Fourteen cases of Addison's disease treated with the adrenals of lower animals, mostly those of sheep, are now on record. The favorite preparation appears to be a glycerite of the minced organs, given with a degree of freedom amounting to from fifteen grains to three drams of those organs daily. In about one-half of the recorded cases, improvement has been noted, and in a few of them the improvement has been very striking, but we are lacking in information as to the stability of it.

Dr. J. W. Grosvenor, of Buffalo, read a paper on "The Effect of Alcohol on the Organs of Special Sense," in which he took the position that upon these organs alcohol is a paralyzer and depressant even when given in small doses. The popular doctrine that alcohol is a stimulant is erroneous, and the resort to it for its supposed stimulant action in cases of cardiac depression, or heart failure, or during anesthesia by chloroform or ether, is inadmissible and based upon wrong views.

This radical opinion was vigorously opposed by Drs. Hare, of Philadelphia; Haine, of Chicago; Ouchterlony, of Louisville, and Hill, of Milwaukee.

"Early Diagnosis of Cancer of the Stomach by Means of Chemical Analysis of the Gastric Contents" was the title of a paper by Dr. W. C. Weber, of Cleveland, Ohio. The absence of hydrochloric acid in the stomach contents is not evidence of cancer. Neither is the presence or absence of lactic acid reliable. He advised microscopic examination of the blood, and careful palpation, percussion, etc., in order to make out a diagnosis.

Dr. Everett Flood, of Massachusetts, presented a paper on "Intestinal Antisepsis, Diet, and Castration in Relation to the Treatment of Epilepsy." He described some illustrative cases in which the operation had been followed by some benefit.

Dr. J. M. Marvin, of Louisville, read a paper on "The Ductless Glands," calling attention to the economic importance of the "internal secretion" of these glands. He said that the secretions of the suprarenals, thyroid, pituitary gland, when emptied into the blood influences nutrition, and that associated with perverted secretory functions of these glands we have Addison's disease, exophthalmic goitre, myxedema and cretinism, acromegalia, etc. So, also, interrupted functions of the bronchial glands may have something to do with the clubbed fingers and other nutritional changes in the skin and bony tissues in the later stages of pulmonary tuberculosis.

The Committee on Nominations reported the following officers for the ensuing year:

President—Dr. Nicholas Senn, Chicago.

First Vice-President—Dr. George M. Sternberg, Surgeon-General U. S. Army, Washington, D. C.

Second Vice-President—Dr. Edmond Souchon, New Orleans.

Third Vice-President—Dr. J. B. Thomas, Pennsylvania.

Fourth Vice-President—Dr. Willis F. Westmoreland, Atlanta.

Treasurer—Dr. H. P. Newman, Chicago.

Assistant Secretary—Dr. T. B. Schneideman, Philadelphia.

Librarian—Dr. George W. Webster, Chicago.

Chairman of Committee of Arrangements—Dr. H. A. Hare, Philadelphia.

Address in Surgery—Dr. W. W. Keen, Philadelphia.

Address in Medicine—Dr. Austin Flint, New York.

Address in State Medicine—Dr. Jerome Cochran, Alabama.

The President-elect, Dr. Senn, was then escorted to the stage by a committee of two, presented by Dr. Cole, and made a timely and eloquent speech of acceptance.

After the introduction and adoption of resolutions of thanks, the Association adjourned to meet in Philadelphia the first Tuesday in June, 1897.

A SOCIETY in Paris, consisting of scientists of note, having about one hundred members, several of whom are women, has the ghastly purpose of placing the brains of its members at the disposal of surviving comrades, for examination and dissection. The society is known as the Mutual Autopsy Society (*La Sociëtë d' Autopsie mutuelle*), and was organized in 1876. Fourteen brains, neatly catalogued, are now contained in a glass case at the end of the meeting-room, and the fifteenth, which in life was the property of M. Abel Havelacque, director of the Anthropological Society, now rests immersed in alcohol on the table of the dissecting-room, where the man's former associates will meet to weigh, probe, cut, and discuss it.—*Medico-Surgical Bulletin.*

CORRESPONDENCE.

A DOUBLE MONSTROSITY.

HIAWASSEE, GA., April 6, 1896.

March 27th. I was called to see a woman who was said to be in labor. When I arrived I found her in labor, one foot protruding. On examination I found three other feet and legs not born. Soon I found the legs were all grown to one body. When the child was born it had four feet and legs well developed, four arms and hands; it had four ears and one face on the side of two heads. The body was grown together from the pubic bone up to the top of the head, making one united body. It had two well developed spinal columns. It was of neither sex; the umbilical cord came out just where the external organs should have been. It had two ani well developed; the umbilical cord was not over five or six inches in length; the placenta was grown or fully attached to the womb. The child was alive at birth, but died in a minute or two after birth. The mother of the child did well, and is reasonably healthy now. I tried very hard to get the parents to give me the child, but I could not get it. They would not even let me have its picture taken, and they buried the child at one corner of the garden for fear I would have it taken up. Many people went from Hiawassee to see the child. Now this is a very interesting case, one not often met with. I have never seen or read of one just like it.

J. F. JOHNSON, M.D.

SIMPLE TEST FOR ALBUMIN.

Dr. A. C. Ewing (*Medical Record*) says: Draw up into a small glass pipette or tube about an inch of the urine, let the finger remain tightly over the top and insert the pipette into nitric acid and draw up under the urine about the same quantity of acid, when, if even a trace of true albumin be present, there will appear a beautiful line of demarkation between the acid and urine. This test is as accurate as it is simple and, besides, is decidedly economical and far less troublesome than all others.

EDITORIAL.

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THE AMERICAN ACADEMY OF MEDICINE AND THE AMERICAN MEDICAL ASSOCIATION.

The late meetings of these medical bodies in Atlanta were highly successful in every particular. In another place will be found a condensed report of the most important transactions of the American Medical Association.

The Academy of Medicine was the first to convene. The president, Dr. Henry M. Hurd, of the Johns Hopkins Hospital, delivered his address on "Laboratories and Hospital Work," in which he called attention to the late improvements in hospital construction, the proper equipments of a well regulated modern hospital, and recommended the addition of complete clinical, pathological, and experimental laboratories to all hospitals, in which disease in all its relations may be fully studied. Dr. J. T. Searcey, of Tuscaloosa, Alabama, read an interesting paper on "Insanity in the South," in which he stated there were some peculiar features belonging to the insane in this section of country. "In the South the whites are almost all Americans, mostly from the same English emigration. The most self-adjustable man in the world is the native American, and this is seen even when he is insane; hence the patients are more pleasant to deal with. The natural race traits of the negro show in the insane negro patients. He is passively adjustable to his environment. The negro insane can be managed with more uniformity than whites, and on the whole can be made more profitable and self-supporting." Dr. Frederick Peterson, of New York, presented a paper advocating the establishment of "Colonies for Epileptics." He said that a home should be provided for these people who are cut off from the pursuits and pleasures of life by a malady which robs them of their faculties; that a school should be established where they shall be enabled to receive an education; that they should be given an industrial education; that their cases should be studied by the best medical men and that they should be treated in a scientific manner; that there should be an abundance of land where they should be put to work in agricultural pursuits; that there should be a small hospital, a library, and other features to make the colony as homelike as possible; that most of the food-stuffs should be produced on the land; that the educational features should never be lost sight of, and in addition to the schools and industrial training, everything that can in any way be helpful in furthering such purpose should be encouraged. An interesting paper was read by Dr. J. W. Babcock, of South Carolina, on "Tuberculosis in Public Institutions." He gave some figures to show that there was an alarming amount of tuberculosis in the prisons and insane asylums of the country, and showed how it had been lessened at some institutions by a thorough cleaning of the quarters used by those who were affected. He stated that this disease spread among the inmates by the tubercle bacilli being deposited on the walls of the rooms, on the floors, and on the bedding by the sputa of the ient. After the walls had been thoroughly cleaned by scraping, and after the premises had been thoroughly disinfected, there was a marked decrease in the disease. Dr. George M. Gould, of Philadelphia, read an able and scholarly paper on "Vivisection," in which he paid his respects to those who were endeavoring to have vivisection prohibited by law. Far from advocating indiscriminate vivisection, he pointed out how it should be done in order to arrive at scientific conclusions. All experiments on animals should be made for a definite purpose by competent persons, and should be as nearly painless as possible. Dr. Chas. McIntire, secretary of the Academy, read a paper on "Some of the Distinguishing Characteristics of the Homo Medicus," and Dr. Elmer Lee, of Chicago, read one on "The Confusion of Pharmacy Relating to the Theory and Practice of Medicine."

In connection with the Academy of Medicine, the Association of American Medical Colleges and the National Confederation of State Boards of Medical Examiners also held their meetings. The president of the latter, Dr. W. W. Potter, delivered an address upon "Relations of Medical Examining Boards to the State, to the Schools, and to Each Other," an abstract of which will be found on another page. Mr. J. Russell Parsons, representing the Regents of the University of New York, presented an interesting paper on "Preliminary Education, Training, and Practice in New York." Methods of medical teaching were discussed in short talks by Professors Kelley of Louisville, Winslow of Baltimore, Holmes of Chicago, Vanderveer of Albany, Haggard of Nashville, Roberts of Philadelphia, and others. A banquet on Saturday night was an interesting social feature of the meeting of the Academy of Medicine, and short speeches were made by Drs. Hurd of Baltimore, Gould of Philadelphia, Potter of Buffalo, Millard of St. Paul, Bulkley of New York, Shannon of Cabaniss, Ga., Ford of Augusta, Holmes of Chicago, Gaston of Atlanta, and others.

The meeting of the American Medical Association was a representative one, both in attendance and in the character and extent of work done. The President, Dr. Cole, made a good presiding officer, and if his decisions at times were somewhat autocratic, they were based upon a desire to maintain order. His address was of broad scope and thoughtful construction, and while portions of it may be subject to some criticism, it doubtless reflects in a large measure prevailing sentiments of the conservative profession.

We have given good abstracts of the addresses on Medicine, Surgery, and State Medicine, to which the reader is referred. The Centennial Celebration of the Discovery of Vaccination was carried out by the reading of three addresses, as stated in our Society Reports, and a resolution was adopted providing for their publication in book form.

Resolutions were adopted to provide a permanent home for the Journal of the Association, and members are asked to send their ballots to the Journal during June and July. It is proposed to establish a building fund in order to provide for a proper home for the Association Journal. A resolution was also adopted protesting against the passage of a bill now before the Senate, entitled "A Bill for the Further Prevention of Cruelty to Animals in the District of Columbia," which is in reality a bill to prevent vivisection in the District.

The Report of the Treasurer showed a balance on hand of $10,084.98.

Dr. Jerome Cochran, of Alabama, reported progress on the part of the Committee on a National Department of Public Health. The committee was enlarged so as to include a member from each State, and continued.

The annual fight on the Secretary was renewed at this meeting. The Association seems to occupy a peculiar and unfortunate position in relation to its Permanent Secretary. If it be true that the Secretary of the American Medical Association holds his position for life, and that, as was said on the floor at the late meeting, the Association cannot change its Secretary, the situation is certainly anomalous and undesirable. It is equally unfortunate for the Association to witness every year efforts to displace the present Secretary on the ground of inefficiency, and to elect somebody else to the office who could discharge the duties of the same with more competency and satisfaction to the Association. Without an unkind feeling to Dr. Atkinson, who has certainly labored long and doubtless to the best of his ability for the Association, it does seem to us that thirty years in this office ought to have satisfied him, and that the time has come for a more active and up-to-date secretary. Doubtless the opposition to Dr. Atkinson will be in evidence again at the next meeting. In the meantime, confidentially, the true and final solution of the difficult situation could be peaceably effected by a timely resignation.

Among the social features provided for the entertainment of visiting physicians and their families should be mentioned the Complimentary Concert by the young ladies of the Cox Female College, the Georgia Barbecue at Lithia Springs, and the receptions at the houses of Drs. J. S. Todd, R. B. Ridley, and A. W. Calhoun, all of which were duly patronized and enjoyed.

We close this already long article with some comments on the meeting taken from the late medical press.

The *Philadelphia Polyclinic:* The Atlanta meeting of the American Medical Association passed most enjoyably and busily. So crowded with good section work are all of these meetings now that those attending one section faithfully had little opportunity to follow the general course of events. The hospitalities extended were most kind and typical; the open clubs, the Georgia barbecue, and the beautiful receptions at the houses of eminent practitioners along the famous Peachtree street, most acceptable in themselves and having the great though negative merit of interfering very little with the scientific work. The standard was well maintained in the meeting.

The *Medical News* (New York): The recent meeting in Atlanta met the expectations of those who attended it as fully as could be expected, considering the location, in a Southern city, at this season of the year. The number in attendance, although not quite up to the average, was sufficient to afford an inspiring audience, not only in the general sessions, but also in the various sections. . . . In regard to the scientific work, the exercises were made memorable by the addresses of Osler in general medicine, and Senn in surgery. . . . The social functions fully realized the hospitable greeting of the welcoming address. All the details of the barbecue were carried out with so much system that it lacked entirely the tiresome features so often a part of such a performance. The lovely day, the delightful grove, the attractive tables reaching out their long length in the shade of the trees, all combined to make a picture that will not soon be forgotten by him who had the pleasure of enjoying it.

The *Journal of the American Medical Association:* There have been few meetings in the history of the Association which have passed off more harmoniously and more pleasantly in all respects than that just concluded at Atlanta. . . . Socially, the Southern hospitality, which is always conspicuous at these gatherings, made itself felt in such a way as to make every delegate feel at home. . . . The Georgia barbecue and the receptions at the houses of Drs. Calhoun, Ridley, and Todd are occasions long to be remembered. Indeed, if there is any criticism, it is that the Committee of Arrangements and citizens did too much to make the visit of the members agreeable and pleasant.

And so on with many others of like nature. Only one writer, so far as we have seen, or heard of, has been guilty of the inexcusable breach of good manners, accepting one's hospitality and then abusing it. This is one bilious Dr. Frederick T. Rogers, of Providence, Rhode Island, through the *Atlantic Medical Weekly,* of the same place. We regret very much that this gentleman did not enjoy his visit. He seems to be "sorry that he came," and we hasten to assure him that a similar feeling is cordially entertained at this end.

AN inquiry in a late *Medical Record* entitled "The American Medical Association—What is it?" has received a just and well deserved rebuke from several medical journals. The purported inquiry does not appear to have proceeded so much from ignorance as from a desire to be funny. It is said to be a custom with "Me Lord," the editor of the great medical muck-a-muck, whenever he wishes to relieve his congested gray matter of any particularly happy thought, he publishes an inquiry along the desired lines from an alleged correspondent in some remote quarter, and then proceeds to answer it. It is suggested that the call for information in the present instance is of this character. However that may be, the real author of the sentiments in question should be ashamed of them, whoever and whereever he may be. We may say for the benefit of the gentleman that the American Medical Association is a very healthy association of good doctors representing the bone and muscle of the great democratic mass of American physicians and surgeons, who think it not beneath them to keep themselves informed as to the history of our greatest national association, the parent of them all; who attend its meetings as often as they can, and seek as far as they can to build it up rather than pull it down; and that it has numbered and still numbers in its active membership a host of good men whose names will remain an honor to American medicine many years after the nameless "correspondent" of the *Record* shall have returned to nothingness and been forgotten

SELECTIONS AND ABSTRACTS.

OBSTETRICS AND GYNECOLOGY.

EDITED BY DR. VIRGIL O. HARDON.

PUS IN THE PELVIS.

Dr. Thomas A. Ashby, in a paper read before the Gynecological and Obstetrical Society of Baltimore, and published in *The American Journal of Obstetrics,* considers the dangers of delay in dealing with pus in the pelvis. He writes that whether the patient be in imminent danger or not, prompt interference in dealing with pus, especially pus in the pelvis, cannot be too soon acted upon. He says:

"The pus sac is a further source of danger from the fact that it invites repeated attacks of intrapelvic inflammation, which in turn lead to the formation of adhesions between the sac wall and surrounding tissues. The removal of the sac is in this way made more difficult and dangerous, whilst early removals are attended with less danger to life and with a surer restoration to health. All who have removed these old adherent sac walls can appreciate the difficulties and dangers of such procedures and the sequelæ which not infrequently follow after recovery from abdominal section. How often is it that the abdomen has to be reopened a second or third time for the drainage of newly-formed pus accumulations from an old infected area left behind! For, remove these old pus sacs with all the care possible, we cannot always feel sure that every particle of the infected sac wall has been removed.

"Chronic pus sacs in the pelvis involve risk to life in their remote influences. The local condition may create comparatively little local pain or disturbance. The patient may enjoy such an exemption from pelvic disturbances as to mislead her attending physician in his diagnosis of her true condition. Pus formation and pus absorption may go on in such a passive way that the symptoms of the case are referred to such general bodily conditions as anemia, chlorosis, malarial fever, and, as in one case I once operated on, which for weeks was treated for typhoid fever, when neither death nor recovery followed, a new doctor and a new diagnosis discovered a large pelvic pus accumulation. The patient recovered promptly after the removal of the pus sac. The remote effects of pus are almost as pernicious as its immediate effects. The difference in results is found in the rapidity and violence with which symptoms follow in the latter conditions, often overwhelming the patient with the explosive force of the inflammatory or septic action, whilst in the former cases chronic blood changes and nutritive disturbances of heart, kidneys, and other organs are the most usual evidences of pus absorption."—*Am. Med. Review.*

THE TREATMENT OF THE STUMP OF THE UMBILICAL CORD.

In his new book on the "Therapeutics of Infancy and Childhood," Dr. A. Jacobi says:

"In wrapping up the end of the cord no oil must be used. Warmth and dryness favor mummification; moisture and exclusion of air gangrene. This holds good also for the cord when it is separated from the living baby by an additional ligature, and in the dead. Thus, the former forensic axiom that a dry cord proved life, which prevailed for decades after Meckel had demonstrated its fallacy as early as 1853, is absolutely worthless. Thus, fatty substances and moisture of any kind must be avoided as much as possible. Powdered subnitrate of bismuth, or oxide of zinc, or iodoform, or salicylic acid, one part with ten parts of starch, may be dusted round the insertion of the cord and over the stump daily. The latter application is not necessarily useless (from the point of view of antisepsis), for the separation of the cord is a gradual one, and not uniform through the whole thickness of the amnion and the three blood-vessels.

"The size of the sore stump and the rapidity or slowness of cicatrization depend upon the thickness of the cord, the intensity of the line of demarcation, and the reactive inflammation. The latter are most marked in vigorous infants. As a rule the surface is dry a few days after the falling of the cord, and cicatrization complete within twelve or fifteen days after birth. This normal process is, however, disturbed by careless handling, local irritation, and infectious influences. In these cases there is a serous or purulent secretion, and cicatrization may be deferred for many weeks. Under these circumstances local treatment is required. Carbolic acid ought to be avoided, for the newly-born and the infant are easily influenced by its poisonous properties. Solutions of lead, zinc, or alum answer quite well. As before, however, I recommend the powders of zinc oxide, bismuth subnitrate, alum with starch, and salicylic acid with starch or iodoform. Such measures will always prove helpful; to omit them in time of erysipelas or diphtheria is unpardonable. Perchloride of iron, or sulphate of iron, must not be used. Under the hard coagulation formed by its application over the whole wound secretions will accumulate, cannot escape, are absorbed, and produce sepsis. I have seen babies die from applications of iron to the umbilical stump, as I know of women dying for the same reason when the hemorrhages from their uteri or from the lacerated vagina were maltreated in the same manner. —*New York Medical Journal.*

PUERPERAL SEPSIS.

The *Medical and Surgical Reporter* gives a synopsis of a paper by Dr. Lewis S. McMurtry, of Louisville, on "The Indications for Operation in Puerperal Sepsis," as follows: Pre-existing pus-tubes, a uterine fibroid or ovarian dermoid converted by the trauma of labor into activity as an infecting source, should be treated by promp resort to abdominal section. Septic endometritis, with or without putrefactive changes in retained clots and débris, should be relieved by cleansing, antisepsis, and drainage. Thorough intra-uterine drainage and irrigation in appropriate cases arrest the septic process. Curettage in these cases is too extensively used when the septic focus is limited to the uterine cavity, as the granular area of Bumm may be broken through; closed sinuses and veins at the placental site reopened; repeated chills and rising pulse and temperature marking the invasion of new areas of infection. Plugging up the uterine cavity is positively contraindicated; drainage should be facilitated and not obstructed in these cases. Purulent salpingitis, ovarian abscess and suppurative peritonitis, by progressive steps, may extend very rapidly, and the associated peritonitis may be circumscribed or diffuse, consequently careful and deliberate judgment must be exercised before resorting to celiotomy. The time of the operation and the extent to which the operative procedure is to be carried also require sound judgment. Diffuse septic parenchymatous metritis and purulent metritis should be promptly treated by hysterectomy. Puerperal sepsis, wherein the local symptoms are those of diffuse peritonitis without localization of lesions, but where the uterus is presumably the focus of infection, is a grave condition and often justifies exploration and drainage, but hysterectomy will almost invariably prove disastrous.

PYOSALPINX.

Dr. Joseph Price, of Philadelphia, makes an earnest plea in the *Medical and Surgical Reporter* of December 21, 1895, for adherence to the suprapubic operation for removal of pyosalpinx. He condemns the vaginal route of attack of purulent accumulations in the Fallopian tubes because it does not fulfill what is necessary for a perfect or "complete" operation. An operation, to be complete, must remove all that it professes to remove. It must correct all pathological complications and lesions, and leave all surrounding structures in as normal relations as possible. Unrecognized and unrepaired fistulæ, to the number of five or six per cent., following the intra-operation, is alone sufficient reason for its total rejection as one of the most imperfect, inefficient, and unsatisfactory methods ever practiced in gynecology. But, he says, the suprapubic method, as perfectly practiced—free of errors of omission and commission—is the only operation that can give perfect, immediate, and permanent results. The accidents, complications, and sequelæ commonly referred to in discussions of the suprapubic operation—of infection, adhesions, fistula following drainage, and improper ligatures—are all avoidable, except in very feeble patients.

SURGERY.

EDITED BY FLOYD W. MCRAE. M.D.

THE ACTION OF ETHER AND CHLOROFORM ON THE KIDNEY.

From a critical analytical study of 130 cases of narcosis in which the urine was examined prior to the operation and from three to six days after operation, both by chemical analysis and microscopical examination, Eisendrath draws the following conclusions:

1. Albuminuria, which is already present, is increased more frequently by ether than by chloroform.

2. Albuminuria makes its appearance, however, more frequently after chloroform-narcosis than after ether-narcosis—that is, in the proportion of 32 to 25.

3. Their action is equal upon amyloid disease of the kidney.

4. Tube-casts, with and without albumin, are found with equal frequency after chloroform- and ether-narcosis, but disappear more rapidly in the case of ether. This harmful late action of chloroform upon the kidney has been proven to be greater than that of ether by E. Fraenkel.

The author reports in detail an interesting case of death following chloroform narcosis, in which the pathological lesion was a necrosis of the parenchymatous cells of the kidney.—*American Journal Medical Science.*

CIRCUMSTANCES UNDER WHICH CHLOROFORM IS PREFERABLE TO ETHER AS AN ANESTHETIC.

Gay, in commenting on anesthetics (*Boston Med. and Surg. Journal,* 1895, No. 18), says: "Sulphuric ether, under ordinary conditions, is as safe as can reasonably be expected of any agent which produces such beneficent results; that chloroform is safe in a vast majority of instances, but that fatal accidents do occasionally occur under circumstances under which they were not anticipated, and that these accidents can neither be foreseen, prevented, nor remedied; that under rare conditions no known anesthetic is entirely free from danger; that the greater comparative safety of sulphuric ether is slowly being recognized, and hence that its use is gradually displacing, to a certain extent, its more potent and more dangerous rival." The relative safety of these two agents, as just expressed, the writer thinks is decided as surely and as firmly by an intelligent and searching experience of half a century as it is possible to decide any scientific point.

As is well known, however, chloroform is to be preferred for certain cases. These the author indicates in a general way as follows: "All operations liable to be attended with spasms of the glottis, edema of the larynx or lungs, profuse secretion of fluids in the air-passages, and chronic contraction of the muscles of respiration; all cases requiring tracheotomy and esophagotomy, as membranous croup; laryngitis, acute, chronic, traumatic, specific, or tubercular; edema of the larynx or glottis; malignant disease of the throat and neck; deep cervical cellulitis; deep tumors of the neck, as bronchocele; foreign bodies in the air passages; foreign bodies in the esophagus; bronchitis in the aged; asthma; and, finally, in cases liable to be complicated by difficult or suspended respiration. —*American Journal Medical Sciences.*

CANCER OF THE BREAST.

Dr. W. L. Rodman states that the results of Keen, Bull, Dennis, Weir, Halstead, and Powers, six Americans, who have within the year published their statistics in operation for cancer of the breast, show a mortality of less than one per cent. (six hundred and fifty-six operations and six deaths). He concludes his paper with the following propositions:

First. All mammary growths should be removed at once, for innocent tumors carried for a long time become a menace.

Second. The complete operation should always be done in cases of malignant disease.

Third. In nearly every case it is simply impossible to detect enlarged glands until the axilla is opened. Keen says that he cannot do so once in ten times.

Fourth. The mortality should be, with average operators, about three per cent.

Fifth. A radical operation should promise from twenty-five to fifty per cent. of permanent cures, according to the time when patients apply.

Sixth. When in doubt, operate; never wait for symptoms.—*Medical Record.*

APPENDICITIS.

Dr. W. Meyer (*Med. Rec.*, Feb. 29,) sums up the indications for operative intervention as follows:

1. In cases of diffuse perforative appendicitis the operation must always be done at once. Patients have the best chance to recover if operated upon within the first twelve hours. Exceptionally patients get well without an operation.

2. In cases of acute appendicitis the patients always need careful observation. If the pulse goes up above 116 to 120 and has the tendency to stay there, the indication for an operation is given.

In case of doubt the operation is better than waiting.

3. In cases of sub-acute (mild) attack of appendicitis, also after the first severe attack from which the patient recovers without immediate operation, the appendix should be removed. The appendix, once inflamed, has to be looked upon as a diseased organ which is very apt to give repeated and more serious, even fatal, trouble in the future.—*International Journal of Surgery.*

ANESTHESIA STATISTICS.

The following statistics are obtained from a collective investigation undertaken by the German Surgical Society (Gurlt), covering the five years, 1890–95. In this time chloroform was administered 201,224 times, with 88 deaths, or one in 2,286; ether 42,141 times, with 7 deaths, or one in 6,020; mixture of alcohol, chloroform, and ether 5,744 times, with one death; mixture of chloroform and ether 10,162 times, with one death. This report is surprisingly favorable to "mixed anesthesia."

GENERAL MEDICINE AND THERAPEUTICS.

Edited by Dr. Luther B. Grandy.

Acute Bronchitis in Children.

The following prescriptions and suggestions have been collected by *Pediatrics* (April):

It is usually wise to begin the treatment with a laxative of castor oil or calomel. During the first twelve or twenty-four hours an emetic in conjunction with a warm bath may do good.

℞	Powdered ipecac	gr. i to gr. ii.
	Syrup of ipecac	℥ i.

Mix. Sig. A teaspoonful every ten minutes until the desired effect is produced.—*Perrier.*

Counter-irritation over the chest is usually indicated, with a thin mustard plaster, camphorated oil, oil and turpentine, or the following:

℞	Oil of cloves	ʒ ii.
	Camphorated oil	℥ iv.

Mix. Sig. For external use.—*J. Lewis Smith.*

Warm drinks should be given, particularly hot milk, and, if the fever is high, one or two grains of quinine may be given in a little coffee or aromatic syrup of yerba santa. The air of the room must be kept fresh, and moderately warm and moist. The vapor of turpentine is often beneficial.

Flaxseed poultices covered with oil-silk are useful, especially for the relief of pain, and cold compresses are useful not only to reduce the fever, but as a stimulant, which causes deep inspirations.

℞	Mist. Glycyrrh. Co	℥ iv.

Sig. Half a teaspoonful every two (2) hours to a child of three years.

℞	Syr. ipecac.	
	Spts. ether. nitros., aa	ʒ ii.
	Ol. ricini.	ʒ iii.
	Syr. bal. tolut	℥ i.

Misce. Dose: Half a teaspoonful to one teaspoonful, every second hour, for the age of one to two years.—*J. Lewis Smith.*

℞	Ammonii chloridi	ʒ i.
	Syr. bal. tolut.	℥ ii.

Mix. Dose: At the age of three months, fifteen drops; at six months, thirty drops, in water.

℞	Vini ipecacuanhæ	*m* v.
	Liq. ammonii acetatis	*m* x.
	Glycerini	*m* xv.
	Aquam floræ aurantii	*ad* ʒ i.

Misce. F. haustus.

Sig. For an infant, to be taken every four hours.—*Eustace Smith.*

An opiate affords marked relief from the annoyance of the cough, especially at night.

℞	Tinct. opii camph	ʒ i-iv.
	Syrup tolutani	℥ i.
	Aquæ	*ad* ʒ iiss.

Mix. Sig. Shake and take one teaspoonful.—*F. Gordon Morrill.*

℞	Liq. opii composit	gtt. x.
	Potas. bromidi	ʒ i.
	Syr. rubi idæi (raspberry)	℥ i.
	Aquæ	℥ iss.

Misce. Sig. One teaspoonful when needed for restlessness and loss of sleep from cough.—*J. Lewis Smith.*

When the mucous flow has become well established, one of the following mixtures may be prescribed:

℞	Tinct. scillæ	*m* xx.
	Syrup tolutani,	
	Syrup pruni Virgin., aa	℥ ss.
	Aquæ	*ad* ℥ ii ss.

Misce. Sig. Shake and take one teaspoonful for a child one year old.—*F. Gordon Morrill.*

℞	Ammonii carb	gr. v-x.
	Tinct. scillæ	*m* xxv.
	Syrup senegæ	℥ ss.
	Syrup pruni Virgin	℥ iii.

Misce. Sig. Shake and take one teaspoonful three or four times a day, for a child one year old.—*F. Gordon Morrill.*

As the disease progresses, if bronchial secretion becomes very profuse, one of the following prescriptions may be used:

℞	Oxide of antimony	gr. ss.
	Syrup of senega	ʒ i.
	Syrup of acacia	℥ ii.

Mix. Sig. A teaspoonful every two hours.—*Perrier.*

℞	Terpine hydrate	gr. ii-iv.
	Brandy	ʒ ii.
	Syrup of cinchona	ʒ ss.
	Syrup of orange	℥ ii.

Mix. Sig. A teaspoonful every two hours.—*Perrier.*

The coal-tar antipyretics often have a marked effect in diminishing the amount of secretion, lessening the severity and frequency of the cough and relieving the pain.

℞	Phenacetin	gr. xii-xxiv.
	Caffein	gr. i-ii.

Mix. Div. in chart. No. xii (12).

Sig. Give one powder every four (4) hours.—*W. S. Christopher.*

℞	Phenocoll	gr. xv-xxx.
	Camph. monobromat.	gr. ii.
	Caffein citratis	gr. ii.

Mix. Div. in chart No. xii (12).

Sig. One powder every four (4) hours.—*Dillon Brown.*

Again, it must be remembered that certain cases of bronchitis may be of indirect origin, depending upon some affection of the heart, of the stomach, of the liver, and even of the kidneys; of the skin, as in erysipelas; or it may be due to typhoid fever, or measles, or to the elimination of certain medicinal substances; and, finally, it may be of diathetic origin, as gout or rheumatism.

℞	Tinct digitalis	*m* xx.
	Tinct. conii	ʒ i.
	Pulv. ipecac	gr. i-ii.
	Oxymel. scillæ	℥ i.
	Muc. acaciæ	ʒ iiiss.

Misce. Sig. A teaspoonful every three hours when the bronchitis is associated with disease of the heart.—*Ferrand.*

℞	Tinct. nucis vomicæ,	
	Tinct. digitalis, aa	ʒ ss-i.
	Tinct. cardamomi comp	*ad* ℥ ii.

Mix. Sig. A teaspoonful in water four (4) times a day in the cases following upon influenza.—*Thomas Grainger Stewart.*

℞	Sodii salicylatis,	
	Potassii bicarbonatis, aa	ʒ i.
	Syrupi tolutani	℥ ss.
	Aquæ anisi	*ad* ℥ vi.

Mix. Sig. A tablespoonful in water four (4) times a day in the cases depending upon a rheumatic diathesis.

℞	Vini colchici	ʒ i.
	Vini antimonialis	ʒ ss.
	Potassii bicarbonatis	ʒ iss.
	Aquæ destillatæ	*ad.* ℥ vi.

Mix. Sig. A tablespoonful in water four (4) times a day in cases depending upon a gouty diathesis.—*Thomas Grainger Stewart.*

Dry cupping over the back of the chest or a few leeches over the lateral parts of the chest may be extremely beneficial.

THE PLEA OF INSANITY.

This subject has afforded a text for many able papers from the pens of scientific writers, and called forth animated discussions in medical and medico-legal societies for years. Yet more and more frequent has become the plea of insanity as a defense when a person has committed murder or some other heinous crime. The extent to which this plea has been carried, and the success it has met with, has become a cause for gravest alarm. Hardly a week passes that we do not read in the daily papers of a cold-blooded murder where the statement is made that the attorneys have not, as yet, decided whether to enter a plea of self-defense or insanity. A man commits a murder, disguises himself, tries to escape, is finally captured and brought back to the scene of his crime, and immediately begins to act foolish. His attorney, and often the officers about the jail, gravely announce that he is insane. It is proven to the satisfaction of the jury (honest but ignorant) that he is really insane. He is then sent to an asylum for a few months, and finally discharged as cured, to go forth into the world and murder *ad libitum*, without the fear of anything worse than a few months in an asylum, for he has already been proven insane, which, with the help of so-called experts, is easy to do again and again.

Only a short time ago in this county, a man killed another with a coupling-pin, robbed him of $40 and divided it with an accomplice. He denied all knowledge of it when accused, but "broke down and confessed all" when told that his companion in crime was in jail and had told everything. This cold-blooded assassin was pronounced not guilty on the plea of insanity, and sent to our "poor farm" for safe-keeping. His attorney, in a few weeks thereafter went before the county court and asked to have him released, giving the court as a reason for such action that should he be kept longer among the paupers and insane it would surely drive him crazy. The court released him. Now, if this man was insane, for the protection of society, he should have been confined for life, for it was offered in evidence that he had been "weak-minded and foolish from childhood." Could the commission of one murder, and a few months' confinement at the "poor farm," cure him of a lifetime malady? But it is not necessary to cite cases or to go into detail, for every reader of the public press is familiar with such cases. The remedy is what we want.

The one we shall advocate is not new, but to our mind is certainly the best. When a prisoner pleads insanity as a defense for crime, the court should be empowered to appoint a commission of insanity experts to examine (with plenty of time) into and pass on his case. If they agree that he is insane, let the court order him into confinement, at least, until those who are capable of judging shall pronounce him sane. If, on the other hand, he should be pronounced sane, then try him on the evidence, eliminating the insanity dodge. When this is done the plea of insanity as a defense will rapidly disappear.

This is an old subject, but a subject must be considered new and unsettled until settled right. We have thus briefly called attention to this rapidly growing abuse in the hope that the medical profession, and through it the public, may be induced to "rise in their might" and legally put a stop to a practice which is a menace and a disgrace to our civilization.—*Langsdale's Lancet.*

KEEP AN EYE ON CUBA.

The report reaches us that yellow fever is rapidly developing in Cuba, and it behooves the authorities at Quarantine to be on the alert. In these days it should be a matter of exceeding difficulty for yellow fever to gain a foothold here. Still, in view of the fact that the protracted war in Cuba has necessarily interfered with the proper sanitation which is gradually rooting out epidemics from all civilized neighborhoods, it is peculiarly essential that the health officer of the port should keep in touch with the American representatives at Havana in order that the embarkation at that point of all suspicious cases may be prevented.—*American Medico-Surgical Bulletin.*

Doctor—"Your wife is in a critical state; I should advise you to call in some specialist to consult on the case."

Husband—"I told my wife long ago she ought to get proper medical advice, but she thought you would be offended."—*American Druggist.*

MEDICAL ITEMS.

In our last issue, page 147, last line, *limitation* should have been *irritation*.

GERMAIN SÉE, the distinguished French physician, died last month in Paris, aged seventy-eight.

DR. W. C. GIBSON, of Macon, died April 25th, while on a visit to Vineville, in the thirty-ninth year of his age.

DR. W. F. BRUNNER, of Savannah, has been appointed by the Secretary of the Treasury Medical Officer of the Government in Cuba.

IT is said that English will be recognized as one of the official languages at the coming meeting of the International Medical Congress at Moscow.

HERE is another consumption cure, called *anti-microbia*. It is a compound of ozone and cod-liver-oil, and is administered hypodermically. Of ninety patients treated by this method, "all have been cured." Next!

DR. WM. A. STROTHER, of Albany, died May 1st, of pneumonia, aged fifty-six years. He was a Confederate veteran; entered the war as a lieutenant, was soon made surgeon, and served in this capacity till the end of the war. Dr. Strother had acquired a large practice, and his death is a great loss to his community.

THE May issue of the *Medical Mirror* is a souvenir number of the *American Medical Association*, and reflects great credit upon the artistic taste and managerial skill of the editor and owner, that prince of good fellows and high-chief of the Chutmucks, Dr. I. N.

Love, of St. Louis. The Mirror and Dr. Love—long may they shine!

AT the recent meeting of the American Association of Physicians, which met at Washington two weeks ago, the following officers were elected: Dr. J. M. Da Costa, President; Dr. F. C. Shattuck, Vice-President; Dr. I. Minis Hays, Recorder; Dr. Henry Hun, Secretary; Dr. W. W. Johnston, Treasurer; Dr. I. E. Atkinson, Councilor.

FOLLOWING are the officers of the Alabama Medical Association for the current year: Dr. B. W. Toole, Talladega, President; Dr. J. A. Wilkinson, Flomaton, senior Vice-President; Dr. J. C. LeGrand, Anniston, junior vice-president; Dr. C. H. Franklin, Union Springs, and Dr. B. J. Baldwin, Montgomery, Censors for five years; Dr. R. L. Hill, Montgomery, Orator; Dr. G. C. Chapman, Birmingham, alternate Orator.

WE noted in a late issue the death of a lady in Chattanooga from chloroform. A subsequent development of the case was the arrest of the physicians on the charge of murder from criminal negligence. The physicians were well known and respected members of the Chattanooga profession. At the preliminary trial the presiding judge denounced the charges as being without character in fact, law, or morals, and discharged the defendants.

OUR readers will learn with sincere regret of the death of the venerable Dr. H. V. M. Miller, which occurred May 31st. For the last three or four years Dr. Miller's health has been failing, and his final and fatal illness began about two weeks ago. He was in his eighty-third year. Dr. Miller has had a public and private career which it is not permitted many men to enjoy. Successful in his profession as a practitioner and teacher of medicine, he perhaps became better known from the part which he played in Georgia's political history thirty and forty years ago. As the news of his death comes to us as we are going through the press we have not the space now for further remarks. We will present a sketch of his eventful life in our next issue. We beg to assure the relatives of Dr. Miller of our sympathy and condolence.

FRAUD! BEWARE!—The Henry Pharmacal Company, of Louisville, Ky., has been many times addressed in the past twelve months with reference to a so-called solution for Plafayer's Adjustable Cloth Roller Splint which some fraud unknown to them claims they manufacture. It is the method of this rascal to sell the formula for a fixed price, $5.00 or more, with a promise that the Henry Pharmacal Company will forward them a liberal quantity of the solution. Mr. Henry hereby wishes to warn the profession that he owns no such formula nor has any connection with any other interest other than those known in the advertising columns of this JOURNAL at present. The latest heard from this party was from Beaver Falls, Pa., and he seems to be traveling eastward.

THE Committee on Organization of the Second Pan-American Medical Congress has elected Dr. Manuel Carmona y Valle president, Dr. Rafael Lavista vice-president, and Dr. Eduardo Liceaga secretary, and has announced November 16, 17, 18, 19, 1896, as the date of the meeting to be held in the City of Mexico.

The most cordial invitation is extended to the medical profession of the United States to attend and participate in the meeting.

Titles of papers to be read should be sent at the earliest practicable date to Dr. Eduardo Liceaga, Calle de San Andres num 4, Ciudad de Mexico D. F. Republica Mexicana.

Those who contemplate attending should send their names and addresses at as early a date as possible to Dr. Charles A. L. Reed, St. Leger Place, Cincinnati, that the committee in Mexico may be advised of the probable attendance.

THE banquet of the Medical Editors Association at the Kimball House, Atlanta, on the evening of May 5th, brought together some well known representatives of the medical press and other prominent medical men, and a jolly occasion it was. After a delightful and exhilarating, but non-intoxicating, menu, short talks were made by Dr. George M. Gould, formerly of the *Medical News;*

Dr. J. C. Culbertson, of the *Lancet-Clinic;* Dr. J. C. LeGrand, of the *Alabama Medical and Surgical Age;* Dr. John B. Hamilton, of the *Journal of the American Medical Association;* Dr. I. N. Love, of the *Medical Mirror;* Dr. R. Beverly Cole, of California; Dr. H. O. Marcy, of Boston; Dr. Alonzo Garcelon, of Maine; Dr. L. S. McMurtry, of Louisville; Dr. C. A. L. Reed, of Cincinnati; and H. D. Didama, of New York. Among others present were Dr. H. A. Hare, of the *Therapeutical Gazette;* Dr. H. B. Ellis, of the *Southern California Practitioner;* Dr. Chas. W. Fassett, of the *Medical Herald;* Dr. T. D. Crothers, of the *Journal of Inebriety;* Dr. L. B. Grandy, of the ATLANTA MEDICAL AND SURGICAL JOURNAL; Dr. Nicholas Senn, of Chicago; Dr. Geo. M. Sternberg, U. S. Army; Dr. H. A. Kelley, of Baltimore; Dr. W. E. B. Davis, of Birmingham, and others.

WE noticed that several of our advertisers had good exhibits at the American Medical Association.

Messrs. Amour and Company, who of late years have been manufacturing some excellent preparations, had an attractive exhibit.

Fairchild Brothers & Foster displayed their various products, all of which could be called standard, and needing little introduction.

Ch. Marchand had his well known and useful preparations on display. They have made for themselves a well indicated usefulness in medicine and surgery.

Mellin's Food is so well known that a letter addressed "Mellin's Food, U. S. A.," would reach its destination. It has been the standard for years.

Sharp & Dohme, of New York and Baltimore, manufacture a line of tablets, etc., the requisite to the sale of which is simply S. & D. on the label.

It is needless to say that all the displays were made up with special care and attractiveness, and that they were in charge of well informed, courteous, and untiring gentlemen, who spared no trouble to keep the profession in mind of their different articles.

D. Appleton & Co., New York, and W. B. Saunders, Philadelphia, made a good display of their standard line of medical publications.

BOOK REVIEWS.

TWENTIETH CENTURY PRACTICE. AN INTERNATIONAL ENCYCLOPEDIA OF MODERN MEDICAL SCIENCE. By Leading Authorities of Europe and America. Edited by Thos. L. Stedman, M.D., New York City. Vol. V. DISEASES OF THE SKIN. New York, Wm. Wood & Co., 1896.

This is a large volume, the subject-matter of which is handled by men selected from the dermatological field for their fitness for the special work assigned them.

After the anatomy of the skin, the different diseases are taken up in the following order of classification: Parasitic Diseases—Animal, Vegetable; Erythematous Affections; Eczema and Dermatitis; Squamous Affections; Papular Affections; Bullous Affections; Pustular Affections; Phlegmonous and Ulcerative Affections; Diseases of the Sebaceous Glands; Diseases of the Sweat Glands; Diseases of the Hair and Nails; Benign Neoplasms; Xeroderma Pigmentosum; Dermato-Neuroses.

The bibliography is quite full.

One case of Xerodema Pigmentosum should have been credited to M. B. *Hutchins* not M. B. *Hutchinson.*

Some parts of the text are very full. Other parts seem deficient, as the tuberculoses; Cancerous Diseases of the Skin, etc.

The book fills the place intended for it. M. B. H.

VOICE-BUILDING AND TONE-PLACING. By H. Holbrook Curtis, M.D., Fellow of the New York Academy of Medicine, etc. Price $2.00. D. Appleton & Co., 72 Fifth ave., New York.

In this book the theory of singing is thoroughly and capably handled. The anatomy and physiology of the larynx, respiration, and registers of the human voice are scientifically discussed, and many valuable hints on voice-building are given. A casual perusal of this work indicates that it will supply a long-felt need among singers, *i. e.*, the comprehension of the vocal art from a scientific standpoint. This work deals purely with the vocal mechanism and does not touch upon the psychology of singing, which is a point decidedly in its favor. W. O.

INFANTILE MORTALITY DURING CHILDBIRTH, AND ITS PREVENTION. By A. Brothers, M.D., Visiting Gynecologist to Beth Israel Hospital, New York, etc. Being the William T. Jenks Prize Essay of the College of Physicians of Philadelphia for 1895. Published by P. Blakiston, Son & Co., 1012 Walnut St., Philadelphia.

The object of this elaborate essay is to detail the causes contributing to the death of the child preceding, during, or immediately after childbirth, as well as to call attention to the means now at the physician's disposal for the diminution of infantile mortality. The large amount of clinical material in obstetrics and pediatrics to which the author has had access for ten years has peculiarly qualified him for this essay, and we are sure that it well deserved the prize of the Jenks Memorial Fund. It is well worth the careful reading and study of every practitioner. A full bibliography appears at the end of every chapter.

INTERNATIONAL MEDICAL ANNUAL. A Work of Reference for Medical Practitioners. Fourteenth year. 1896. Price $2.75. E. B. Treat, Publisher, 5 Cooper Union, New York.

Following the plan of its predecessors, the 1896 Medical Annual presents a good digest of important medical and surgical material for the preceding year. The volume is even larger and more complete than heretofore. It contains a very good article on the Roentgen photography, with some suggestions as to its uses in surgery. The book is carefully edited, and, like previous volumes, will be found very useful to the practitioner.

TRANSACTIONS OF AMERICAN DERMATOLOGICAL ASSOCIATION. NINETEENTH ANNUAL MEETING.

We have received of Dr. Chas. Warren Allen, Secretary, a copy of the above. It is excellently got up and arranged and contains some beautiful plates. The book is full of instructive reading. The Secretary will please accept our thanks for the copy sent us.

ATLANTA
Medical and Surgical Journal.

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LUTHER B. GRANDY, M.D., MANAGING EDITOR.
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ORIGINAL COMMUNICATIONS.

A SKETCH OF THE LIFE AND CHARACTER OF DR. H. V. M. MILLER.

BY HOOPER ALEXANDER.

No account of Dr. Miller's life that is now possible can give any adequate conception of his history. Georgia has no grievance against him except this, that his personal modesty made him rather shrink from than seek that notoriety which most men crave. So far as I know, his only speech ever preserved in print was an eulogy pronounced over the dead body of Alexander H. Stephens. In it he said that Mr. Stephens's highest title to fame was like that claimed by Pericles, who boasted that in a long public life he had done no act that ever caused a citizen of Athens to put on mourning. May I not justly say that the virtue which Dr. Miller ascribed to his great friend was pre-eminently his own?

Unfortunately the details of his life and work will perish with those who knew him. Nay more, because the men who were his active contemporaries are already gone, those details are already largely forgotten. Too unselfish to seek his own aggrandizement, and too modest to give active aid to those who would gladly have preserved some record of his life, to-day the positive side of his history has largely perished in the evanescent memories of mortal men, and the best we now recall of him is that same tribute he accorded the Great Commoner, that he never brought shame or sorrow to any Georgian.

Dr. Miller was born near Walhalla, in South Carolina, April 29, 1814. His father was General Andrew Miller, one of those hardy men, strong in mind and body, who seem to have been so naturally the product of frontier times and conditions; a dominant, self-assertive, self-reliant man of the sort that blaze out the pathways of civilization and lay the foundations for future States; a man of high broad forehead, steel blue eye, and inflexible courage; one of those men who never fail or falter in loyal devotion to a friend. Among the cherished traditions of my own family is a story of how once when he was a member of the General Assembly, and my grandfather, who was his friend, stood in need of his help, he walked from Augusta to Milledgeville to be in time, because the seats in the stage coaches had been anticipated for days. His wife was a most accomplished and cultured lady, a Miss Cheri, of Virginia birth and Huguenot descent. From her Dr. Miller acquired his elegant literary taste and mastery of English. I have often heard him say that her speech was as perfect as Addison's.

Dr. Miller was named in honor of Colonel Homer V. Milton, a distinguished Georgian, and with whom General Miller had served in the second British war. His name therefore did not, as some supposed, mirror any special classical predilection of his parents.

The present territory of Rabun county was acquired by treaty from the Cherokee Indians in 1819. General Miller soon after emigrated from Carolina and settled at the head of that beautiful valley now known as Head of Tennessee, which stretches away in fields of measureless fertility from Rabun Gap northward, shut in by the Blue Ridge on the south, the Cowee on the east, the Nantahala on the west, and blocked by the Smokies on the north, save for one narrow gorge through which the Little Tennessee cuts its way. Amid these inspiring mountain scenes, the subject of this sketch spent his boyhood, and laid the foundations of that superb education which through life made him the oracle sought by many men. Later his father, again impatient of advancing population, moved further west to the fertile valleys of the present county of Troup, where the son commenced the study of medicine which

H. V. M. MILLER, M.D., LL.D.

later he continued at the Medical College of South Carolina, where he graduated with high honors in 1835.

At this time Georgia had just acquired the Cherokee country. Cassville was then the center of thought and commerce for all Northwestern Georgia. Here the young doctor, intimately acquainted since childhood with the Cherokees, again settled among them. Within a few months after graduation he was married to Harriett Perry Clark, a niece of Judge John W. Hooper, judge of the Cherokee circuit, and his father's intimate friend.

At Cassville was gathered a coterie of young men who were for many years the most distinguished and brilliant leaders of upper Georgia. Of this group Dr. Miller was one of the most noted, and though he was absent from their gatherings for a year or two further prosecuting his studies in Paris, the friendship which he then formed with such men as Warren Akin and Judge Augustus R. Wright was of the most intimate character, and continued through life. While here Dr. Miller saw his first military service in the way of certain expeditions against the Cherokees. For these services, when he was nearly eighty years old, a pension was granted him, though I have often heard him say the expedition was unimportant and unnecessary, and he always showed that his sympathies in the matter were wholly with the Indians.

Both here and afterwards when living on Conaseena creek on the Etowah, he practiced in the families of both Ridge and Ross, the great rival chieftains of the Cherokees, and enjoyed their confidence and friendship. At this time the country was but thinly settled and it was no unusual thing to ride twenty and thirty miles to visit a patient.

In 1847 he removed for a while to Memphis, where he held the Chair of Obstetrics in the Medical College. Here he lost his daughter Florence, a child of ten, to whom he was passionately devoted. During the cholera epidemic his wife insisted on remaining with him. She was stricken down, but recovered, though her health suffered for many years. Shortly afterward he determined to go back to Georgia, and this time settled at Rome, then just springing up at the junction of the Etowah and Oostanaula. On a beautiful range of hills about a mile west of Rome he constructed an elegant home, which, in honor of his mother's Huguenot traditions, he called Coligni, and here he remained honored and esteemed by all classes of men until again summoned to arms.

The famous Eighth Georgia Regiment was one of the first at the front and bore the brunt of battle on the left at Manassas. Colonel Francis S. Bartow, its commanding officer, was senior colonel of the brigade and commanded as brigadier. He was killed at Manassas. Three companies of the Eighth Georgia were from Rome and its vicinity, one of them, the Miller Rifles, Captain John R. Towers, was named in honor of Dr. Miller. Bartow had for years been his personal and political friend, and it was, perhaps, partly due to this fact that Dr. Miller went out as surgeon of the Eighth with the rank of major. One of the old members of the regiment said to me to-day, that he never saw as many wounded men in his life as he saw in Dr. Miller's field hospital that bloody day of the first Manassas.

To those who knew Dr. Miller it is needless to say that he did his full duty from the beginning to the end of the war. At its close he was among the highest officers of the medical staff. Impoverished by the result he went back to Rome and cheerfully at fifty began over again. In 1867 he was called to Atlanta where he spent the balance of his life an active lecturer in the Atlanta Medical College of which at his death he had for many years been Dean. Until 1888 he continued in the active practice, occasionally after that date making special visits, one of these being to his life-long friend, the distinguished Dr. Robert Battey, to whom he ministered successfully when his case had seemed hopeless.

In 1868 he rendered distinguished services to Georgia as a member of the Democratic minority in the Constitutional Convention, and afterwards was elected to represent Georgia in the United States Senate, though that body did not admit him to his seat for nearly three years. He held after this no other public office except that of Principal Physician to the penitentiary during a part of the time that General Gordon was Governor.

For thirty years he was a Trustee of the University. Though not a graduate himself of any academic institution, he was intensely concerned on the subject of higher education. To the University he was deeply attached. His last illness found him preparing for his annual visit to Athens and pondering over measures for the good of the school. One of the things which seemed to concern him most was the apprehension that his recovery would be delayed beyond the commencement.

In December, 1893, he had a severe attack of the prevailing influenza called la grippe so severe in fact that for a while his life was despaired of. His devoted wife, with whom he had lived nearly sixty years, in her anxiety and solicitude for his health, overtaxed her strength, was herself stricken down and died. When it became apparent that she must die it fell to my lot to acquaint him with the sad intelligence. It was one of the most distressing duties I ever had to perform. He received the news calmly and with some expression of hopeful doubt. After a little while he rose from his own bed and crossing the hall to her room, lay down beside her, placed his ear to her chest and listened to her breathing. At that time she seemed to be dying, though she lived nearly a week longer. After this examination he went in every day, and until the last continued to express the hope that her splendid constitution would enable her to rally. When she finally died he rose from his sick bed and accompanied her body to Rome where they had always desired to be buried.

Dr. Miller always seemed to me to regard Rome as his home. During his visit there at the burial of his wife he was deeply affected by the troops of friends and of the children and grandchildren of friends who came to visit him. The manifestations of deep-seated affection for him evoked by his bereavement, from a people he had always loved, touched the tenderest chords of his sympathetic nature, and he could rarely ever afterward allude to the visit without a quaver in his voice.

His last illness came on about the first of May in a violent dysentery. His own judgment of his case was evidently correct, though he made no effort to interfere with or make suggestions to the attending physician. To Dr. W. S. Kendrick, who treated him and to whom he was deeply attached, he said one day, "Doctor, I think your treatment of my case is correct. If the measures you are trying do not relieve me nothing else will." He studiously refrained from counting his own pulse or inquiry about it. During the worst of his attack he refrained almost entirely from food. His own simple habits and Dr. Kendrick's skill finally seemed about to win the battle. On the 29th he seemed to have entirely recovered from the dysentery and got up and dressed. On the 30th and 31st he was up and about the house. In the afternoon he complained of fatigue and at the suggestion of a friend lay down on his bed. As his head touched the pillow the splendid but worn machinery of his body just stopped and he was dead.

Dr. Miller is said to have been a great orator. I never heard him speak but two or three times. In these he justified the reputation he bore. In 1886 he made several speeches in behalf of one whom he had loved for years. In one of these he told an anecdote that turned the tide of a gubernatorial election. The whole State shook with laughter over the story, and it silenced an adverse accusation. His speeches were never prepared. Few were reported, and such as were were not printed.

He was the wisest man I ever knew. His judgment of men was keen, his foresight of events marvelous. His education was self-acquired, his learning prodigious, his memory astounding.

In medicine he was pre-eminently successful, but believed little in drugs. I have heard him say it was doubtful if medicines had not done about as much harm as good. Of medical theories and hypotheses I am, of course, uninformed, but I observed that some of the opinions now almost universally adopted by the profession, he regarded with a sort of good-humored incredulity and amusement, though I do not remember to have heard him say more in doubt or question than this: "Well, the theory is not proven yet." When some French physician announced the discovery of the elixir of youth he said: "You will presently see a lot of doctors poisoning people by hypodermic injections in order to get their names in a newspaper." When the merit of some remedy was argued, about which he was skeptical, and cases were cited where it had wrought cures, he would say: "The Hottentots have proven by experiment that a loud noise will remove an eclipse from the sun."

In opinion he was broadly tolerant, possessed of the simplest faith in God, and more than any man I ever saw, obeyed the injunction to love the Lord with all his strength and his neighbor as himself. In church membership he was a Methodist, and adhered closely to his church organization, though he always claimed that the present form of Methodist church government by bishops was unscriptural and opposed to Wesley's teaching. It was a favorite theme with him also to tease his brethren of the Methodist pulpit by quoting an entry from Wesley's journal about having baptized somebody in Savannah "by immersion according to the Word of God and the practice of the early Christians." It was another of his favorite themes to insist that the Presbyterian Shorter Catechism was the only proper religious system on which to bring up the young. From all which things I am lead to conclude that he believed the Word of God a bigger and a broader thing than any church.

His private charities were broad and generous, and he never allowed his right hand to know what his left hand did. All his life he overtaxed his own resources in the sympathetic helpfulness that made it impossible for him to refrain from giving help where he saw that help was needed.

In personal character Dr. Miller was superb. Brave as Julius Cæsar, he was as gentle as any woman; strong in his own purposes and conviction, he was patient and long-suffering with the errors of his fellow-man, and never lost hope of their ultimately getting right; generous, tender, faithful and kind, with no vestige in his nature of anything mean or little or low, his rule of life was to do to others as he would have them do to him, and this was why he was always recognized as being so completely and essentially a gentleman. The one thing in this world that he hated was a lie; the one thing that he scorned with all the splendid scorn of his big, clean soul was the man who would tell a lie. Upon that which was low and false, and upon men who were low and false, he looked with unutterable loathing.

The world is in some measure better for his having lived in it, and none who ever knew him have ever had cause to reget it. He was given to live years beyond the allotted time of man. Those years he gave to good; not ostentatiously, but humbly and quietly, long expecting and listening for his Master's call, ever ready for it but never impatient. Like one of his favorite characters in literature, he just waited for the roll-call, ready to answer when his name was sounded, "adsum." A modest citizen, a Christian hero, a loyal gentleman has quietly ended his appointed days.

ONE HUNDRED AND SIXTY-SIX CASES OF CANCER OF THE PREGNANT UTERUS OCCURRING SINCE 1886.*

BY GEORGE H. NOBLE, M.D.,
ATLANTA, GA.

My attention was turned to this subject by four cases that came under my observation, one of which was the vaginal hysterectomy, post-partum, reported to this Association one year ago; the others, one of which was a vaginal hysterectomy for incipient cancer of the pregnant uterus, were reported to the Atlanta Obstetrical Society some time in the past.

The success in these cases has encouraged me to look more carefully into the treatment, etc., and as a result report one hundred and sixty-six cases of cancer of the pregnant uterus which have occurred since the year 1886, the time of the Bar thesis.

I shall confine this report mainly to the statistics of the treatment and results, referring you to Bar, Cohnstein, and others for information concerning the age, the period of recurrence, the period of abortions, etc.

There were twelve partial amputations of the cervix in the first seven months of pregnancy, averaging five and one-third months.

Ninety-one and six-tenths per cent. of the mothers recovered from the operations; 8.3 per cent. died; 66.6 per cent. went to full term, one child dying subsequently; and 41.6 per cent. aborted (one conception of six months living, Case No. 11).

Two of the mothers had subsequent operations for the removal of the cancer, but recurrence obtained in both cases. Another conceived a second time and died of peritonitis thirteen days after confinement.

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* Read before the Southern Surgical and Gynecological Association in November, 1895.

OPERATIONS UPON THE CERVIX UTERI.

TABLE I.—INTRAVAGINAL—PARTIAL AMPUTATION OR REMOVAL.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother	Result, fœtus.	Recurrence.	Time of gestation.	Diagnosis.	Remarks.
1	Schanta.	Zeitschrift für Heilkund. Prag., 1887.	Anterior lip.	Amputat'n ant. lip.	Recovered.	Full term.	In posterior lip.	6 mos.	Carcinoma	Cancer returned sixteen days after confinement; vaginal hysterectomy five months after recovery.
2	Bileted, A.	Centralblatt für Gynäkologie, 1884, No. 8, 44.	Polypus in cerv. canal; collum infiltrated.	Curette and cautery.	"	Full term, died subsequently.	Returned; health relatively good nine mos. afterward.	4 5 mos.	....	Degeneration followed curette and cautery, and extended to the vagina.
3	Kaltenbach.	Geburtshilflishrs Lehrbuch, 1893.	Anterior lip.	Excision ant. lip.	"	Full term.	In 4 years on posteri'r lip.	5 mos.	Carcinoma	Posterior lip removed, with recovery.
4	Schribe.	Inaugural Dissertation, Halle-Wittenberg, 1893.	Portio vaginalis.	Excision of cancer.	"	Full term.	In 4 years.	....	....	First excision in 1888, while pregnant; recovered. Cancer returned in 1892; again removed by excision; recovered. Normal delivery at full term.
5	Savory.	Obstetrical Transactions xvii., 2.	Cervix.	Scraping.	"	Pregnancy undisturb'd	Recurred.	....	Carcinoma	Conceived again; spontaneous delivery at seventh month; died thirteen days after.
6	Godson.	Zeitschrift für Geburtshilfe und Gynäkologie, 1875, vol. i., No. 2.	Cervix.	Scraping.	"	Lived.	....	7 mos.	Carcinoma (cauliflower).	
7	Felsenreich.	Wiener Medicinische Presse, 1883, 34.	Posterior lip.	Amputat'n post. lip.	Died.	Lived.	....	4 mos.	Carcinoma	Mother died thirteen days after of peritonitis; carcinoma of lymphatic glands.
8	Helbig.	Greifswald, 1889.	Posterior lip.	Amputat'n post. lip.	Recovered.	Abortion.	....	5 mos.	Carcinoma size pigeon's egg.	
9	Helbig.	Greifswald, 1889.	Anterior lip.	Amputat'n ant. lip.	"	Abortion.	....	....	Carcinoma size apple.	Fœtus size of finger.
10	Olbrich.	Greifswald, 1887.	Anterior lip.	Amputat'n ant. lip.	"	Dead.	....	....	Carcinoma size apple.	

11	Schroeder.	Taken from Ann.de Gyn. et d'Obstet., Paris, 1884, xii., p. 187 (C.H. Stratz).	Anterior lip.	Amputat'n ant. lip.	Recovered.	Abortion 3 wks. after, after living conception	....	6 mos.	....	Anterior lip amputated above vagina.
12	Stratz.	Zeitschrift für Geburtshilfe und Gynäkologie, vol. xii., No. 1.	Anterior lip and cervix.	Amputat'n ant. lip (supra-vaginal).	"	Abortion in 3 weeks.	....	....	....	
	11 operators	....	....	12 cases.	11 R. 1 D.	4 abortions 1 dead. 7 lived.	5 returned. 7 unknown.	....	8 carcinoma. 4 unknown.	

INTRAVAGINAL AMPUTATIONS OF PORTIO VAGINALIS.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother	Result, foetus.	Recurrence.	Time of gestation.	Diagnosis.	Remarks.
13	Bar.	Thèsis de Paris, 1886.	Cervix.	Amputat'n (galvano-caustic) of portio.	Died.	Died.	....	7 mos.	....	Death of mother caused by peritonitis.
14	Schroeder.	Lehrbuch, 5th edition.	Cervix.	Amputat'n of portio.	Recov. from oper'tn	Full term.	Died in six weeks.	5 mos.	Carcinoma	Mother died suddenly after six weeks.
15	Vianden.	Inaugural Dissert., Bonn, 1880.	Posterior lip.	Amputat'n of portio.	Recovered.	Full term.	Returned.	4 mos.	....	Subsequently two operations to remove remaining portions of cancer. Forceps delivery.
	3 operators.	....	....	3 cases.	2 R. 1 D.	2 full term. 1 died.	2 returned. 1 died.	....	1 carcinoma. 2 unknown.	

Of the three cases of intravaginal amputation of the cervix, two recovered from the operations, giving a mortality of 33.3 per cent.; the children the same.

One mother died of peritonitis, one died suddenly six weeks after confinement, and the third had two subsequent operations for removal of the malignancy, making an ultimate mortality of 66.6 per cent.—possibly 100 per cent.

The intravaginal amputations give a combined mortality from operations, of mothers 19.3 per cent., of infants 40 per cent. The above fifteen cases were operated upon at an early stage of the disease (or at a time when the conditions were most favorable for any operative measure), with an ultimate maternal mortality of 60 per cent.; that of the babies 33.3 per cent. (See Table I.)

Sixteen supravaginal amputations were done prior to the seventh month, with a mortality of 6.2 per cent.; six had recurrence of the disease, three had no return, and seven were not observed; there was, therefore, an ultimate mortality of 66.6 per cent. in the nine cases in which the records are complete; thirteen cases were lost, mortality 82.5 per cent. Of the remaining three, one went to full term, 6 per cent., and the other two were not mentioned.

One case aborted thirty-five days after conception, aborted again in forty days; conceived a third time, was delivered normally, and was well five years afterward. These cases were also in the early stages of the disease when the portio vaginalis alone was involved, thus presenting a fair opportunity for testing the merits of the operation. (See Table II.)

There were three cases of supravaginal amputation of the cervix in puerperal state, but the data are not sufficiently complete to give very satisfactory information. Two were operated upon immediately after the confinement, one dying in seven days; the other was not recorded. The cervix in the remaining case was removed three weeks after the confinement and died two months later. The child in this case is the only one recorded as living. The mortality is 66.6 per cent. for both mothers and children. (See Table III.)

There were twenty-three cases of vaginal hysterectomies. In two cases the results are not recorded, leaving twenty-one cases, all successful—mortality *nil.*

The statistics by Pfannenstiel[*] give a mortality of 8.3 per cent. in thirty-six cases since 1882. Of the ultimate results two had recurrence as follows: one in eighteen months, died; one in twenty-nine months, died.

Seven others were well when examined, as follows: two in one year; two in one and one-half years; one in two years; one in four years; one in four and one-third years.

The period of gestation at which the operations were done was as follows: one to two months, eight cases; two and one-half to three months, seven cases; three and one-half to four and one-half months, three cases. The hysterectomies were done before any very rapid extension or growth of the disease had taken place, hence the favorable results; mortality 23.4 per cent. at the end of one year. On throwing out the two cases that were well at the end of one year we have (of the recorded results) five recoveries and two deaths, or a mortality of 40 per cent. in eighteen months. Again throwing out the two cases that were well at eighteen months, we find a mortality at the end of the second year of 66.6 per cent. In this estimate all the living cases who have had no recurrences and have not gone two years since the operation are thrown out. Doubtless some of these have been permanently cured, and would reduce the percentage if accessible.

This is a very good showing for vaginal hysterectomy, which seems to be keeping pace with the advance of surgery; thus prior to 1882 the immediate mortality was, according to Gusserow,[†] Duncan,[‡] and others, 23 to 28 per cent. Later, Fritsch[§] reported 16 per cent.; next, Pfannenstiel[||] estimated it at 8.3 per cent.; then Fabbri,[**] Modena, made it 4.1 per cent.; and, finally, the writer reports twenty-one cases without a death. (See Table IV.)

There were seven cases of vaginal hysterectomy in the puerperal period from fourteen to twenty days after abortion or delivery; all

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[*] Bar thesis.

[†] Gusserow, "Die Neubildungen des Uterus," Stuttgart, 1886.

[‡] Obstetrical Transactions, 1885.

[§] Bar thesis, Paris.

[||] Ibid.

[**] *American Journal of Obstetrics and Diseases of Women*, No. 200, p. 288.

TABLE II.—SUPRAVAGINAL AMPUTATIONS, SEVEN MONTHS AND UNDER.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother	Result, fœtus.	Recurrence.	Time of gestation.	Diagnosis.	Remarks.
16	Schroeder.	Taken from Ann. de Gyn. et d'Obst., Paris, 1894, xli., p. 187 (C. H. Stratz).	Os uteri.	Supravaginal amputation.	Recovered.	Lithopedion.	No recurrence.	....	Carcinoma	
17	Schroeder.	Ibid.	Os uteri.	" "	"	Abortion in 4 days.	No recurrence.	4 mos.	"	
18	Stratz.	Zeitschrift f. Geburtshilfe und Gynäkologie, vol. xii., No. 1.	Portio vaginalis.	" "	"	....	....	... .	"	
19	Stratz.	Ibid.	Portio vaginalis.	" "	"	Abortion 4th day.	....	4 mos.	"	
20	Drude.	Erlanger, 1889. (This is duplicate Case 11 of Wendrim's 61 cases.)	Portio vaginalis size of fist.	" "	"	Abortion in 17 days.	....	4 mos.	"	
21	Hofmeier.	Zeitschrift f. Geburtshilfe und Gynäkologie, 1886, vol. xiii.	Ant. and post. lips, size of a dollar.	" "	"	Abortion.	Recurr'nce in 7 months	7 mos.	"	
22	Hofmeier.	Ibid.	Portio vaginalis.	" "	"	Abortion.	Early recurrence.	....	"	
23	Hofmeier.	Ibid.	Portio vaginalis.	" "	"	Abortion.	Recurr'nce in 13 mos	....	"	
24	Hofmeier.	Ibid.	Portio vaginalis.	" "	"	Abortion.	19 months recurrence in pelvic connective tissue.	5 mos.	"	
25	Hofmeier.	Ibid.	Portio vaginalis.	" "	Died from operation.	....	....	....	"	
26	Schroeder.	Zeitschrift f. Geburtshilfe und Gynäkologie, 1889, vol. xvi., and 1891.	Portio vaginalis.	" "	Recovered.	Aborted after 35 days.	No recurrence.	2 mos.	"	Aborted again in forty days. Conceived again; normal delivery. Alive and well five years after.
27	Drude.	Erlanger, 1889.	Right side, both lips.	" "	"	Abortion.	Well one year after.	2 mos.	"	Retained placenta, which was removed next day. Peritonitis; slow recovery.

28	Drude.	Ibid.	Tumor of lips size of goose egg.	" "	"	Abortion.	…………	………	…………	
29	Seegelken.	Jena, 1892.	Cervix.	" "	"	Abortion.	Well one year after.	4 mos.	Carcinoma	
30	Lee (N. Y.)	Amer. Journ. Obstetrics, No. 124, p. 400.	Cervix.	" "	"	Abortion.	…………	4 mos.	"	
31	Mundé.	By letter.	Cervix.	Supravaginal amput. by galvano-cautery.	"	Full term.	…………	3 mos.	…………	Pregnancy unsuspected.
	9 operators.	…………………………	…………	16 cases.	15 R. 1 D.	12 aborted. 1 full term 1 lithoped. 2 unkno'n.	3 no return. 2 well 1 yr. 4 recur'nce 7 unknown.	………	14 carcino. 2 unkno'n.	

TABLE III.—SUPRAVAGINAL AMPUTATION OF THE CERVIX IN THE PUERPERAL STATE.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother	Result, fœtus.	Recurrence.	Time of gestation.	Diagnosis.	Remarks.
32	Schroeder.	In C.H.Stratz(Zeitschrift f. Geburtshilfe u. Gyn., xii., p. 28), taken from Ann. de Gyn. et d'Obst. Paris, 1884, xii., p. 187.	Cervix.	Supravaginal amputation of cervix aft'r confinem't.	Died 7 days later.	Unknown.	…………	………	Carcinoma	
33	Schroeder.	Ibid.	Cervix.	Supravaginal amputation of cervix 3 weeks after confinem't.	Died 2 mos. after operation.	Living.	…………	………	"	
34	Felsenreich.	Centralblatt für Gynäkologie, 1884, No. 33.	Cervix.	Supravaginal amput. of cervix immediately after confinem't.	Not stated.	Not stated.	…………	………	"	Curetting and turning.
	2 operators.	…………………………	…………	3 cases.	2 D. 1 unk'n	1 died. 1 lived. 1 unknown.	…………	………	3 carcino.	

VAGINAL HYSTERECTOMY.

TABLE IV.—PREGNANT UTERUS.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother	Result, fœtus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
35	Kottbus.	Berliner klinische Wochenschrift, 1887, No. 22.	…………	Vag. hysterectomy.	… ….	Destroyed.	Well after 2 years.	2 3 mos.	None.	
36	Hofmeier.	Zeitschrift f. Geb'rtshilfe und Gynäkologie, 1892, vol. xxiii., Krukenberg	Ant. lip (incipient).	“ “	Recovered.	“	Well 4 yrs. and 4 mos. after.	3 mos.	Carcinoma	
37	Müuchmeyer.	Archives f. Gynäkologie, 1889, vol. xxxvi., No. 3.	Ant. lip.	“ “	……	“	Well 4 yrs. after.	1 mo.	“	Cancer large and discharging pus before operation. Uterus partially fixed.
38	Gusserow.	Zeitschrift f. Geburtshilfe und Gynäkologie, 1888, vol. xiv.	Portio vag. (incipient).	“ “	Recovered.	“	…………	1-2 mos.	“	Pregnancy unsuspected.
39	Krukenberg	Ibid., 1892, vol. xxiii.	Cervix.	“ “	“	…………	Well 18 mos	……..	“	
40	Krüg.	Ibid (Krukenberg).	Cervix.	“ “	“	…………	Well 1 year	……..	“	
41	Taylor.	Med. Record, Feb. 28, '91.	Cervix.	“ “	“	…………	…………	2 mos.	“	
42	Schrebe.	Inaugural Dissertation, Halle-Wittenberg, 1893.	Portio vag.	“ “	“	…………	Died in 18 mos; recurrence.	3 mos.	“	
43	Mursinna.	Ibid., Würzburg, 1891.	Portio vag.	“ “	“	…………	……….	3 mos.	“	
44	Billroth.	…………………………	Cervix and vagina.	“ “	“	…………	…………	……..	“	Vesico-vaginal fistula.
45	Taylor.	Med. Record, Feb. 18, '91.	Portio vag.	“ “	“	…………	…………	2 mos.	“	
46	Hofmeier.	Deutsche medicinische Wochenschrift, 1887.	…………	“ “	“	…………	…………	3 mos.	None.	
47	Thiem.	Frauenartz, July, 1886.	Portio vag.	“ “	“	…………	Died in 2¾ years.	3 mos.	Carcinoma	
48	Greig Smith	Bristol Lancet, 1887.	Portio vag.	“ “	“	…………	…………	2 mos.	Carcinoma (cauliflowr)	
49	Bresmecke.	Mohrs Inaugural Dissert. Halle, 1889.	Ant. wall of cervix.	“ “	“	…………	…………	2 mos.	Carcinoma	
50	Bresmecke.	Ibid.	Post. wall of cervix and roof vagina	“ “	“	…………	…………	3 mos.	“	
51	Kallenbach.	Ibid.	Portio vag.	“ “	“	…………	…………	4 mos.	“	
52	Mochenradt	Archiv. f. Gynäkologie, vol, lxiv., p. 568.	…………	“ “	…….	…………	…………	……..	None.	

53	Vander Veer	Journ. Am. Med. Assoc., 1892, xix., pp. 14-17.	Ant. lip.	Vag. hysterectomy.	Recovered.	....	....	2⅓ mos	Carcinoma (caulifio'r).	
54	Spencer Wells.	Med. Chir. Trans., Lond., lxv., p. 25; also in Ann. de Gyn. et d'Obst., Paris, 1894, xlii., 1895.	Portio vag.	" "	"	....	....	4⅓ mos	Epithelioma.	
55	Hernandez, E.	Ann. de Gyn. et d'Obst., Paris, 1894, ii., pp. 81, 97-187-202.	Post. lip.	" "	"	....	Good he'lth 1 year later	2 mos.	Carcinoma	
56	Kinke.	Amer. Journ. Obstetrics, No. 198, p. 828.	Portio vag.	" "	"	....	....	....	....	Pregnancy unsuspected.
57	Noble, G. H.	Records Grady Hospital, Atlanta, Ga.	Portio vag.	" "	"	....	Well 17 mos afterward.	3½ mos	Carcinoma	Pregnancy known to exist.
	20 operators	....	....	23 cases.	21 rec. 2 unk'n	Destroyed.	Recurr'nce 66.6 per ct. dead in 2 years.	....	18 carcinoma. 1 epithel. 4 unknown.	

TABLE V.—VAGINAL HYSTERECTOMY AFTER ARTIFICIAL ABORTION OR IN PUERPERAL PERIOD.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother	Result, foetus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
58	Olshausen.	Klinische Beiträge zur Gynäkologie, 1884, p. 101.	Portio vag.	Vag. hyst. 14 dys after artificial abortion.	Recovered.	Dead.	....	....	None.	
59	Berothod.	Centralbl. f. Gynäkologie, 1887, No. 29.	Portio vag.	Vag. hyst. 20 dys after artificial abortion.	"	"	....	6 mos.	Carcinoma	Turning.
60	Loehlen.	Ibid., 1891, No. 10.	Portio vag.	Vag. hyst. dur. puerperal peri'd	"	....	....	....	"	
61	Loehlen.	Deutsche med. Wochen.	Cervix.	Vag. hyst. 18th day.	"	....	....	.. ..	"	
62	Krukenberg.	Zeitschrift f. Geburtshilfe und Gynäkologie, 1892, vol. xxiii.	Post. lip.	Vag. hyst. 17 dys after abortion.	"	....	....	....	"	

VAGINAL HYSTERECTOMY.

TABLE IV.—PREGNANT UTERUS.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother	Result, foetus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
35	Kottbus.	Berliner klinische Wochenschrift, 1887, No. 22.	....	Vag. hysterectomy.	... .	Destroyed.	Well after 2 years.	2 3 mos.	None.	
36	Hofmeier.	Zeitschrift f. Geb'rtshilfe und Gynäkologie, 1892, vol. xxiii., Krukenberg	Ant. lip (incipient).	“ “	Recovered.	“	Well 4 yrs. and 4 mos. after.	3 mos.	Carcinoma	
37	Müuchmeyer.	Archives f. Gynäkologie, 1889, vol. xxxvi., No. 3.	Ant. lip.	“ “	......	“	Well 4 yrs. after.	1 mo.	“	Cancer large and discharging pus before operation. Uterus partially fixed.
38	Gusserow.	Zeitschrift f. Geburtshilfe und Gynäkologie, 1888, vol. xiv.	Portio vag. (incipient).	“ “	Recovered.	“	....	1-2 mos.	“	Pregnancy unsuspected.
39	Krukenberg	Ibid., 1892, vol. xxiii.	Cervix.	“ “	“	....	Well 18 mos	....	“	
40	Krüg.	Ibid (Krukenberg).	Cervix.	“ “	“	....	Well 1 year	....	“	
41	Taylor.	Med. Record, Feb. 28, '91.	Cervix.	“ “	“	....	....	2 mos.	“	
42	Schrebe.	Inaugural Dissertation, Halle-Wittenberg, 1893.	Portio vag.	“ “	“	....	Died in 18 mos; recurrence.	3 mos.	“	
43	Mursinna.	Ibid., Würzburg, 1891.	Portio vag.	“ “	“	....	....	3 mos.	“	
44	Billroth.	....	Cervix and vagina.	“ “	“	....	....	....	“	Vesico-vaginal fistula.
45	Taylor.	Med. Record, Feb. 18, '91.	Portio vag.	“ “	“	....	....	2 mos.	“	
46	Hofmeier.	Deutsche medicinische Wochenschrift, 1887.	....	“ “	“	....	....	3 mos.	None.	
47	Thiem.	Frauenartz, July, 1886.	Portio vag.	“ “	“	....	Died in 2¾ years.	3 mos.	Carcinoma	
48	Greig Smith	Bristol Lancet, 1887.	Portio vag.	“ “	“.	....	....	2 mos.	Carcinoma (cauliflowr)	
49	Bresmecke.	Mohrs Inaugural Dissert. Halle, 1889.	Ant. wall of cervix.	“ “	“	....	....	2 mos.	Carcinoma	
50	Bresmecke.	Ibid.	Post. wall of cervix and roof vagina	“ “	“	....	....	3 mos.	“	
51	Kallenbach.	Ibid.	Portio vag.	“ “	“	....	....	4 mos.	“	
52	Mochenradt	Archiv. f. Gynäkologie, vol. lxiv., p. 568.	....	“ “	....	....	....	....	None.	

53	Vander Veer	Journ. Am. Med. Assoc., 1892, xix., pp. 14-17.	Ant. lip.	Vag. hysterectomy.	Recovered.	....	....	2½ mos	Carcinoma (caulifio'r).	
54	Spencer Wells.	Med. Chir. Trans., Lond., lxv., p. 25; also in Ann. de Gyn. et d'Obst., Paris, 1894, xlii., 1895.	Portio vag.	" "	"	....	....	4½ mos	Epithelioma.	
55	Hernandez, E.	Ann. de Gyn. et d'Obst., Paris, 1894, ii., pp. 81, 97-187-202.	Post. lip.	" "	"	....	Good he'lth 1 year later	2 mos.	Carcinoma	
56	Kinke.	Amer. Journ. Obstetrics, No. 198, p. 828.	Portio vag.	" "	"	....	....	....	....	Pregnancy unsuspected.
57	Noble, G. H.	Records Grady Hospital, Atlanta, Ga.	Portio vag.	" "	"	....	Well 17 mos afterward.	3⅓ mos	Carcinoma	Pregnancy known to exist.
	20 operators	....	....	23 cases.	21 rec. 2 unk'n	Destroyed.	Recurr'nce 66.6 per ct. dead in 2 years.	....	18 carcinoma. 1 epithel. 4 unknown.	

TABLE V.—VAGINAL HYSTERECTOMY AFTER ARTIFICIAL ABORTION OR IN PUERPERAL PERIOD.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother	Result, fœtus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
58	Olshausen.	Klinische Beiträge zur Gynäkologie, 1884, p. 101.	Portio vag.	Vag. hyst. 14 dys after artificial abortion.	Recovered.	Dead.	....	....	None.	
59	Berothod.	Centralbl. f. Gynäkologie, 1887, No. 29.	Portio vag.	Vag. hyst. 20 dys after artificial abortion.	"	"	....	6 mos.	Carcinoma	Turning.
60	Loehlen.	Ibid., 1891, No. 10.	Portio vag.	Vag. hyst. dur. puerperal peri'd	"	....	....	....	"	
61	Loehlen.	Deutsche med. Wochen.	Cervix.	Vag. hyst. 18th day.	"	....	....	....	"	
62	Krukenberg.	Zeitschrift f. Geburtshilfe und Gynäkologie, 1892, vol. xxiii.	Post. lip.	Vag. hyst. 17 dys after abortion.	"	....	....	....	"	

TABLE V.—*Continued.*

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother	Result, fœtus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
63	Flore.	Centralbl. f. Gynäkologie, 1891, 32 (duplicate Case 12, Wendriner's 61 cas's	Cervix (incipient).	Vag. hyst. dur. puerperal peri'd	Recovered.	Dead.	....	....	Carcinoma	Perforated child on account of exhaustion.
64	Theilhaber.	Archiv. f. Gynäkologie, 1894, vol. lxvii, p. 56.	Portio vag.	Vag. hyst. 20 dys after delivery.	"	"	....	....	"	Labor established by injection of water to which lysol had been added. Os uteri contracted around child's neck, causing its death.
	6 operators.	....	....	7 cases.	7 rec.	4 dead. 3 unknown.	....	....	5 carcino. 2 unknown.	

TABLE VI.—VAGINAL HYSTERECTOMY, POST-PARTUM.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother	Result, fœtus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
65	Noble, G. H.	Trans. Southern Surg. Assoc., 1894.	Portio vag. nearly destroyed by ulceration	Vag. hyst. 72 hours after confinement.	Recovered.	Lived.	Recur. in 6 months.	....	Carcinoma	

recovered. The cancers were in an incipient stage and the wombs small, so that in these respects the operations were under favorable conditions. The chief objections to operating in the puerperal state are the increased vascularity of the tissues, the usually worn down condition of the patient, and the difficulty experienced in effectually sterilizing the vagina, constantly bathed in foul smelling, septic lochia, etc. (See Table V.)

So far there is one case of vaginal hysterectomy post-partum (done close upon confinement). This one made a very fortunate recovery, though desperate and apparently unfavorable (case No. 63) by the writer. These eight cases without a death demonstrate that we need not fear to operate during the puerperal period when there is a reasonable hope for success. (See Table VI.)

The total number of abdominal hysterectomies is sixteen; twelve of these were Freund's operation, one after Mackenrodt's method, and the remainder not described. Of eleven cases seven died from the operation, making the death-rate 43.7 per cent. One case had enchondroma of the pelvis; another had return of the cancer in one year; and a third had a return in a few months and died seven days after an operation for ileus due to cancer of the intestines. These three are the only ones with complete records, therefore it is impossible to give an estimate of the ultimate recoveries. The products of conception were all lost. (See Table VII.)

Cæsarean section was done forty-three times, as follows: conservative (or Sänger), twenty-six; Porro, nine; Freund's, eight times. Of the twenty-six conservative operations seventeen died, seven recovered; in two the results are not recorded, and one was dead before the operation was performed. Mortality in twenty-three cases, 43.7 per cent. The high death-rate is evidently due to the fact that these cases are usually exhausted from prolonged labor, sepsis, etc., which unfits them for operations of this magnitude, for in the cases that do recover the wound heals kindly. In addition to the causes just mentioned, the chances for complications to arise subsequent to the operations are very much increased; thus the liability to secondary hemorrhage and sepsis is much greater than in the non-malignant. This is illustrated by the fact that of the sixteen deaths, three died of peritonitis, two from hemorrhage sub-

ABDOMINAL HYSTERECTOMY.

TABLE VII.—OF PREGNANCY.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother	Result, fœtus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
66	Spen. Wells.	....	Cervix.	Freund's.	Lived.	Dead.	In one year	6 mos.	Epithelio'a	
67	Cittadini.	Centralblatt f. Gynäkol., 1892, No. 17.	Body and cervix.	"	"	"	....	3 mos.	Carcinoma	Enchondroma of pelvis; vaginal separation of cervix.
68	Zweifel.	Centralblatt f. Gynäkol., 1889, No. 12.	Portio vag.	"	"	"	....	6 mos.	"	
69	Zweifel.	Lehrbuch d.Geburtshilfe	....	"	Died.	"	....	....	....	
70	Zweifel.	Ibid.	....	"	"	"	....	....	....	
71	Stocker.	Centralblatt f. Gynäkol., 1892, No. 32.	....	"	"	"	....	6 mos.	....	
72	Mackenrodt	Archiv. f. Gynäkologie, vol. xliv., p. 568.	....	"	Recovered.	"	....	....	....	
73	Mackenrodt	Ibid.	....	"	Died.	"	....	....	....	
74	Mackenrodt	Ibid.	....	"	"	"	....	....	....	
75	Fritsch.	Deut. med. Wochenschrift, 1893, p. 1185.	Ant. lip.	"	Recovered.	"	....	7 mos.	Carcinoma	
76	Hernandez.	Ann. de Gyn. et d'Obst., Paris, 1894, xlii.	Cervix.	Freund's, after transfusion of salines.	Coll'pse	"	....	6 mos.	"	
77	Hernandez,	Ibid.	Cervix.	Freund's, after curetting and cauteris't'n	Recovered.	"	....	5 mos.	....	
78	Hernandez.	Ibid.	Cervix.	Mackenrodt's meth	Recovered.	"	....	6 mos.	....	No. 78. Cancer extensive; returned in several months with cancer in intestines. Diagnosis: *Ileus.* Operation: Removal of diseased part of intestine and made artificial anus. Died 7 days later.
				COMPLICATED BY EXTRAUTERINE PREGNANCY.						
79	Martin.	Verhandlungen des Fifth Congresses f. Gyn., p.281.	Cervix.	Abdominal hysterectomy.	Recovered.	Dead.	....	....	Carcinoma	Complicated by extrauterine pregnancy of 17 years' standing.
80	Munt.	Zeitschrift f. Geburtshilfe und Gynäkol., vol. xxvi.	Portio vag.	" "	"	"	....	... ...	"	Complicated by extrauterine pregnancy; tubal abortion 1 month; hematocele.
	9 operators.	....	16 cases.	....	9 R. 7 D.	....	....	....	6 carcino. 1 epithel. 9 unkno'n.	

Also one other case in which the operation is not mentioned (see Decorzant, Bulletin Société Anatomique, 1884, p. 260). Mother died.

sequent to the operations, one from anemia, and two from exhaustion. Excluding the three cases of peritonitis as a factor in the death-rate of all the abdominal operations, 25 per cent. of the deaths were caused by complications not common to the non-malignant subject, and doubtless it would appear greater if the immediate cause was known in all the cases. All cases dying at the end of three weeks and under are recorded in the list of the dead. One that died at the end of two months is recorded as recovered, having safely passed the effects of the operation. Of the twenty-six cases, twenty-three babies were born alive, three dead, and two died respectively two weeks and two months afterward—mortality 11.5 per cent. (See Table VIII.)

The number of recoveries in the Cæsarean-Porro operations were four; deaths, five, or mortality of 55.5 per cent. One of the recoveries went insane, after fourteen days, from chronic alcoholism. These cases were more favorable than those upon which the conservative operation was done, five of the nine having the cervix only involved.

Of the conceptions seven were saved (twins in one instance), three lost, and one not stated, giving a mortality of 30 per cent. (See Table IX.)

In eight Cæsarean sections by the Freund method there were three recoveries and five deaths, giving a mortality of 62.5 per cent. Out of this number five babies were saved, mortality 42.8 per cent.; six of these cases were complicated, four by extensive exudates in the pelvis, one dying the next day with peritonitis (pre-existing ?), with a temperature of 39.5 C., another had been in labor seven days, while still another was very weak and anemic.

This is an unfair test for Freund's operation, some of them being unfit for any attempt at radical operation, especially the four with extensive exudates in the vaginal walls. If these were thrown out (with three deaths and one recovery) the mortality would be slightly reduced. Thirty-four chilrdren were born alive, eight died, and two were not recorded, making a total of forty-four, there being twins in one case. This gives an aggregate mortality of 22 per cent.

CÆSAREAN SECTION, CONSERVATIVE, AND COMBINED WITH OTHER OPERATIONS.

TABLE VIII.—CONSERVATIVE, OR AFTER SÄNGER.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, fœtus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
81	Schroeder.	Ann. de Gyn. et d'Obst., Paris, 1894, xli., p. 187.	Cervix.	Cæsarean section, conserv't'e	Died 2 days after oper.	Lived 2 months.	....	6 mos.	....	
82	Schroeder.	Centralbl. f. Gyn., 1888, p. 10.	"	" "	....	Dead.	....	....	....	
83	Grapow.	Zeitschr. f. Geburtsh. u. Gyn., 1889, 1 u. 110.	....	" "	Death from anemia.	Lived.	....	....	Malignant tumor.	
84	Morris.	Brit. Med. Journ., 1883, vol. i.	Cervix and post. roof of vagina.	" "	Recovered.	"	....	6 mos.	Carcinoma	
85	Ehlers.	Braunswig, Archiv. f. Gyn., 1887, vol. xxx.	Cervix, uterus and vagina.	" "	"	"	....	....	"	Operation done 18 hours after labor began; convalescence normal.
86	Bar.	Archiv. f. Gyn., 1887, vol. xxx.	....	" "	Died 3 hrs. after; not from oper.	"	....	....	Osteo-carcinoma of pelvis.	
87	Berthod.	Centralblatt f. Gyn., 1887, No. 29.	Cervix and vagina.	" " one hour after death	Died of sepsis.	Dead.	....	....	Carcinoma	
88	Lusk (N.Y.)	Archiv. f. Gyn., 1888, vol. xxxiii.	Cervicis vesicæ.	Cæsarean section.	Died after 2 months.	Lived.	....	....	"	Connective tissue infiltrated; condition unfavorable.
89	Merkel.	Centralblatt f. Gyn., 1889, No. 44.	Cervix and roof of vagina.	" "	Died 6 days sup. peritonitis.	"	....	....	"	Parametric connective tissue infiltrated.
90	Solzmann.	Königsberg, 1890.	Cervix, tuberous tumor.	" "	Died 2 days peritonitis.	Died.	....	... .	"	Condition unfavorable.
91	Teufel.	Archiv. f. Gyn., 1889, vol. xxvi., No. 2.	Uterus and vagina.	" " after part'l removal 7 mos. before	Died in 21 days.	Lived.	....	....	"	Connective tissue infiltrated.
92	Teufel.	Archiv. f. Gyn., vol. xxxvi., No. 2.	Carcinoma (extended).	Cæsarean, Sänger.	Died 3 mos. of hemor.	Died in 2 weeks.	... .	....	"	
93	Parak.	Revue Obstetrique, Ap'l, 1891.	Cervix.	" "	Lived.	Lived.	....	....	"	

94	Jeannel.	L'Ábeille Médicale, Ap'l, 1891.	Cervix and vagina.	Cæsarean, Sänger.	Died 18 dys exhaustion	Lived.	....	....	Carcinoma	
95	Lusk.	Fromme'’s Jahresbericht, 1887, p. 221.	Cervix, bladd'r and parametric con. tissue.	" "	Died in 2 months.	"	....	....	"	
96	Bagdonick.	Centralblatt f. Gyn., 1891, No. 6.	Cervix and vagina.	" "	Died 15 dys	"	....	....	"	
97	Gueniot.	Frommel's Jahresbericht, 1892, p. 359.	Portio vaginalis.	" "	?	"	....	....	"	
98	....	Revaista Medica de Mexico.	Uterus and vagina.	" "	Died.	"	....	....	"	
	Munk.	Prager medicin. Wochen. 1890, No. 43.	Cervix.	" "	Recovered.	"	....	....	"	
100	Mendes de Leon.	Nederl. Tjidschrift von Genesak, 1888, No. 2.	"	" "	Died 6 days	"	....	....	"	
101	Merkel.	Munchen. med. Wochen., 1889.	Cervix and vagina.	" "	Died 8 days	"	....	....	"	Operation after 16 hours of labor pains.
102	Klingelhöfer.	Inaug. Dissert., Marburg, 1888.	" "	" "	Died 2 dys, hemor'age.	"	....	....	"	
103	Solman.	Inaug. Dissert., Königsberg, 1890.	" "	" "	Died 2d dy, peritonitis.	"	....	....	"	
104	Goodell.	Frommel's Jahresbericht, 1889, p. 296.	" "	" "	Lived.	"	....	....	"	
105	Pawleck.	Frommel's Jahresbericht, 1889, p. 300.	" "	" "	Lived.	"	....	....	"	
106	Meyer.	Chauté Annalen, vol. xiv.	" "	" "	Died 24 hrs, exhaustion	"	....	....	....	
	21 operators	....	6 limited to cervix. 18 involving neighboring structures 2 not mentioned.	26 cases.	17 died. 7 recov. 1 died before oper. 1 not mentioned.	25 children. 23 living. 2 dead.				

Of the forty-three cases of Cæsarean section many were done regardless of the kind of operation best suited to them; for instance, there were seven cases of the conservative operation when the portio vaginalis or cervix uteri alone was involved. Total hysterectomy might have been done with hope of ultimate recovery in some of them.

Again, Freund's operation was done in four cases where the exudate or disease had extended to the surrounding parts, which increased the death-rate of the operations done by this method. They were better suited to the Porro or to the conservative operations. In five of the Porro it is possible that total hysterectomy might have been effected, as the parauterine tissues were not involved. This perhaps is not an unjust criticism, for the operations were all done in recent years and at a time surgery was making rapid strides toward perfection; especially is this applicable to those done in the last few years, as they should have profited by previous results. While total extirpation following Cæsarean section may not give as small a mortality in the immediate results as the conservative operation, I feel assured that in *properly selected* cases it is the ideal operation where the fetus can be born *per vias naturales*. It offers some hope to the mother.

According to these figures the conservative Cæsarean operation is unquestionably the safest of the three, so far as it concerns the mother. It ought, therefore, to be employed in all cases with obstruction to the birth of the child by extensive exudates or where there is not a reasonable hope of eradicating the malignancy.

Porro's operation is supposed to diminish sepsis in the cavity of the uterus, but that is counterbalanced by a suppurating stump in the abdominal wound.

If, therefore, it is a question of election between the two latter operations, the feebleness or weakened physical forces of the patient ought to decide in favor of the conservative Cæsarean operation.

It might be said, however, that there are not a sufficient number of Porro operations in these statistics to give a fair estimate of its value. I must confess that I was prejudiced against the conservative operation as done in the past, regarding it in some in-

TABLE IX.—CÆSAREAN SECTION ACCORDING TO PORRO.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother	Result, fœtus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
107	Leopold.	Archiv. f. Gyn., 1890, vol. xxxvii. No. 2.	Vagina.	Cæsarean, Porro.	Recovered.	Lived.	....	... ...	Carcinoma	Left section of the pelvis infiltrated.
108	....	Ibid.	Cervix.	" "	Normal for 14 days.	Unknown.	....	....	"	Insane after 14 days from chronic alcoholism.
109	Krassowskie.	Petersburg. Gyn., 1888, vol. xxxii.	"	" "	Died.	Lived.	....	....	"	
110	Beaucamp.	Petersburg. Gyn., 1889, vol. xxxvi. No. 2.	"	" " with inversion of stump to vagina after Frank	Died 4 mos. afterwards	Twins: 1 lived. 1 died.	Metastasis. 4 mos.	. .. ...	"	
111	Clauss.	Tubingen, 1890.	"	Cæsarean, Porro.	Died in 4 days.	Lived.	.... .	....	"	Extended infiltration, tympania uteri.
112	....	Archiv. f. Gyn., 1889, vol. xxxvi. No. 2.	Cervix and roof of vagina.	" "	Recovered	Dead.	......	....	"	Inguinal glands infiltrated.
113	Sutergin.	Deutsche med. Wochen., 1891, No. 19.	Cervix.	" "	Died in 6 weeks.	Lived.	....	....	"	
114	Sutergin.	Moscow, Ibid.	Cervix and roof of vagina.	" "	Died in 7 days, sup. peritonitis	Lived.	....	....	"	
115	Murphy.	Frommel's Jahresbericht, 1889, p. 313.	Cervix.	" "	Died in 3 days.	Dead.	....	....	"	
	8 operators.	....	....	9 cases.	5 recov'd. 4 died.	6 recov'd. 3 died. 1 unknown.				

TABLE X.—CÆSAREAN SECTION ACCORDING TO FREUND.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother	Result, fœtus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
116	Bischoff.	Zeitschrift f. Geburtshilfe und Gyn., 1884, vol. x. Gönuer.	Cervix.	Cæsarean, Freund.	Died in 9 hours.	Lived.	....	....	Carcinoma	Patient very weak and anemic; operation difficult on account of extended infiltration.
117	Schroeder.	Ibid, 1886, vol. xii. Stratz	"	" "	Died in 1 day, peritonitis.	Dead.	....	....	"	Temp. 39.5° C.
118	Fritsch.	Centralblatt f. Gyn., 1892, vol. xvi. Möller.	Portio vag. and post. vag. wall.	" "	Recovered in 2 mos.	Lived.	....	....	"	
119	Gönuer.	Zeitschr. f. Geburtshilfe und Gyn., vol. x. No. 1.	Cervix.	" "	Died in 8 hours.	Lived.	....	....	"	
120	Schroeder.	Centralblatt f. Gyn., 1886, p. 10.	Cervix and lower part of uterus.	" "	Died in 5 hours, peritonitis.	Dead.	....	....	"	
121	Möller.	Ibid, 1892, No. 6.	Cervix.	" "	Recovered.	Lived.	....	. .....	"	
122	Fochier.	Frommel's Jahresbericht, 1889, p. 134.	"	" "	Died 4th dy peritonitis.	Dead.	....	......	"	Operation after 7 days of labor pains.
123	Hernandez.	Ann. de Gyn. et d'Obst., Paris, 1894, xiii., p. 196.	....	" " and by vaginia.	Recovered	....	....	......	"	
	7 operators.	....	8 cases.	....	3 recov'd. 5 died.	4 recov'd. 3 died. 1 unknown.				

stances a reckless abandonment of the mother for the sake of an often undeveloped, ill-nourished offspring that may soon die or inherit the malignancy. But such is not the case when the mother's condition is hopeless; the child's interest must then be subserved. (See Table X.)

(*Continued in August number.*)

PRACTICAL PATHOLOGY OF THE MUCOUS MEMBRANE OF THE NOSE, THROAT, AND EARS OF YOUTHS.

NUMBER III.

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The Gradual Increase of the Diseased Condition. If a pieee of injected turbinate process from a subject in this grade is placed under a microscope, the abnormal condition of the mucous glands, the increased diameter of the blood-vessels, the irregularity of their course and diameter, positively preclude the supposition that the inflammation can be only a few years old. The whole appearance asserts that the disease is nearly equal in age to that of the subject. Not only this, but the extension of the disease to other parts contiguous or connected by nervous or vascular structure becomes more and more manifest, extension that is physically impossible in a shorter length of time.

The Nasal Passages in Youths—aged from ten to twenty years—exhibit proportionately greater evidence of inflammation than those of the younger grades; some of the surface blood-vessels are enlarged so as to be plainly seen with the unaided eye, the largest being from ten to forty times their normal diameter. There is a general increase in color due to the increase of the age of the inflammation. The secretion has more pus in it, and is thicker on account of evaporation caused by increased heat. Frequently it emits a fetid odor, due entirely to its retention in the passages.

If a piece of mucous membrane of the locality where this fetid secretion adheres is examined under the microscope, many of the largest mucous glands will be seen to be very much enlarged and distorted, as well as abnormally full of unexpelled fetid secretion. From many of these enlarged glands shred-like projections of the tenacious fetid secretion hang outward. If a solution of permanganate of potassa is applied with a brush, these shred-like projections are colored, the color being exactly the same as seen in life, when this solution is employed in cleansing a nasal passage; the more diseased the membrane the higher the coloring, showing that it is the secretion principally that is colored. Under the microscope it is seen that no part of the mucous membrane is so much colored as is the part where the fetid secretion adheres. This proves that while the permanganate may deodorize the fetid secretion that is on the surface, it does not remove it, for if it did remove it the part would not be so highly colored. This microscopic demonstration also shows why the peroxide of hydrogen cannot cleanse a nasal passage thus affected; it may cleanse all the secretion outside of the glands, but cannot get inside of them, their mouths being too small. The patient cannot tolerate the quantity that would be required to deodorize the secretion inside of the glands.

Many have insisted that the fetor comes from the mucous membrane itself, because the odor persists after the passages have been thoroughly washed out with an antiseptic water. The microscope proves this to be a mistake; the fetor comes from the unremoved secretion. Cleansed mucous membrane emits no odor, certainly not the one under consideration. Even if a brush, or a sponge, or a cotton applicator *could* reach all the surface covered by this secretion, none of them can be relied upon to cleanse, such is the tenacity of the secretion. If this is the case, should we expect a watery solution, warm or cold, to remove it, especially as we know that water will not dissolve it? The effect of warm water or other astringents—for water manifestly acts as an astringent—prevents the normal functions of the membrane, namely, the formation of mucus. Besides this, water is absorbed by endosmosis and increases the disability of the mucous membrane; the proof of which is that the patient takes cold more frequently and severely after its use.

The mucous membrane forming this kind of secretion has not been made clean by any kind of human effort that has yet been tried. Since 1875 I have not used water in the nasal passages; from 1862 to 1874, inclusive, I unsuccessfully employed water—many times every day, in all bearable temperatures, in combination with every material, amounting to several hundred kinds, that I was sure would not be a positive injury. After the use of the watery solution, I faithfully and patiently tried, sometimes by the hour, to complete the cleansing with a small brush, with a soft sponge, and with absorbent cotton. I used the faradic and galvanic currents in combination with all these, without cleansing the nasal passages *in one case.*

This kind of secretion clings to the outside surface as well to the inside surface of the mucous glands *purely* because there is no normal mucus formed to wash it off, and until mucus that is nearly normal, at least, washes this secretion away, it will remain where it is seen to adhere. This is a very valuable pointer from pathology; the wise will heed it.

The Turbinate Processes. The enlargement of these projections keeps pace with the increase in the size of the nasal passages. Frequently one of the inferior turbinates is as large as the end of the patient's little finger. The blood-vessels, which make up the principal bulk of the inferior turbinates, are proportionately increased in size, and are a little more irregular in their course than are those in the younger grades. If colds have been frequent the enlargement may be so great as to completely occlude the passage. It is seldom that this occlusion continues throughout the day; when it does so, then tonsil-growths will be seen, and sore throat will be frequent each fall and spring. Of course this condition soon makes the sufferer a mouth-breather, but mouth-breathing is not commonly started in this grade. If the sufferer does become a mouth-breather at this time of life, this disability, while it is not complained of by those in the younger grades, is now so decidedly uncomfortable and is so noticeable to others that a physician is consulted at once. The patient may keep his mouth so slightly open as scarcely to be noticed, but the complaint will soon so increase in severity as to compel him to seek relief. If he does not get relief, he may have an attack of pruritic rhinitis (hay-fever) or asthma, or other lung trouble.

Nose-bleed is a symptom of acute inflammation; that is, a sudden engorgement of the blood-vessels, one that bursts the vessels and allows the blood to flow. While this is not of very frequent occurrence, yet it is more common in this grade than in the older or younger grades. The reason why it is not more common is because the nasal inflammation has now become quite chronic; the thickening of the walls of the blood-vessels has kept pace with the increased size of the vessels. When hemorrhage does take place, it indicates that the patient's system—that is, his stomach, bowels, and kidneys—has been out of order, or that there is an excess of fluid in the blood, and at the same time a severe cold in the head has been taken so as to suddenly increase the inflammation. In this case the pressure of blood in the blood-vessels has been greater than the thin walls of the blood-vessels could withstand; consequently rupture followed, frequently to the great relief of the sufferer, especially if the hemorrhage came from the blood-vessels having their origin from cranial vessels.

Tumors, such as gelatinous and fibroid—really one kind of tumor but of different aged growths—are common in this grade. Most frequently they are attached to the most dependent portion of the turbinates, showing plainly that their cause is due to the irritating presence of acrid nasal secretion. All tumors or growths in the nose, throat, and ears have the same cause, namely, irritating secretion from an inflamed mucous membrane. The proof of the correctness of this assertion is that the treatment of the inflamed parts will cause the disappearance of lately formed growths. I have seen in almost hundreds of instances small gelatinous growths in the nose, throat, and ears disappear while preparing the parts for an operation; that is, while reducing the inflammation by treatment so as to prevent excessive hemorrhage and accelerate the healing process after the operation. I have a patient who visits me a few times each fall and spring upon whom I discovered a small tumor on the left vocal cord in 1884. After treating him for a little over one week the tumor disappeared. After an absence of two years he returned—so had the tumor, on the same spot. A ten-days' treatment caused it to disappear again. In about fifteen months it reappeared, to go away with a week's treatment. Its recurrence was the only fact that caused alarm.

Enlargements and Growths of various kinds usually commence in this grade; sometimes they are so small that it requires the eye of an expert to detect them. Every swelling or enlargement, if maintained, is *sure* to become a growth, and one growth is *sure* to increase congestion, and this has a tendency to produce other growths. This is invariable, and the sooner it is known the better for all concerned, and the number concerned is legion. These serious results are solely due to a mechanical cause and one that is not at all difficult to understand when plainly stated; it is as follows:

The Mechanism of Growths. Every swelling in the nasal passage takes away air-space, thus preventing normal respiration. As every inspiration *must* draw in a certain amount of air into the lungs (and this normal requirement cannot be lessened even to the extent of five cubic inches), the curtailment of air-space *must* increase the rapidity of the stream of air so as to maintain the normal quantity of air in the lungs.

During inspiration through the normal nasal passages there is a slight rarefaction of air in all parts of the respiratory tract, and during expiration there is a slight condensation of air in the same passages. This is the normal condition, but a deviation from this, even to a very slight degree, *must* result in producing a more or less abnormal condition not only in the nasal passages but in various contiguous organs and those connected by vascular and nervous structures. It is evident that even a very slight swelling in one nasal passage *must* lessen the air space, and this lessening *must* cause greater rarefaction of air than normal, and this air-exhaustion, acting as an air-pump on the blood in the blood-vessels *must* increase the congestion, and this increased blood-supply *must* increase the growth, which means still greater air-exhaustion followed by increased diseased action, until the life of the patient is taken, not by this growth alone, but by consequential diseases that frequently follow this diseased condition.

The contrast between the excess of air-exhaustion and the excess of air-compression becomes greater with the increase of the growth in the nasal passages. These abnormal conditions cannot be continuously maintained without positive injury to every organ connected with the organs of respiration: The head and brain through the nervous connections and through the cerebro-nasal circulation, the eyes through ophthalmo-nasal circulation, the ears through the disturbance of the normal density of the air as it passes up into the Eustachian tube, the larynx through its continuity of structure and by vascular and nervous connections, and the lungs by the abnormal extremes of air density.

Cartilaginous and Osseous Over-Growths of the Septum Nasi. While these over-growths are not very marked in this grade they always commence in these ages. The cause of their appearance is the same as that of other growths, namely, continued excessive blood-supply due to maintained congestion of the perichondrium and periosteum. The growth usually appears on one side only, at first more frequently on the left.

The Site of the appearance of the growth is important, as it indicates the source of the irritation that starts and maintains it. I have yet to see a growth start on the septum where there was an absence of accumulated irritating secretion. If the growth is well inside the nasal passage, it will be found just opposite one of the turbinates.

No growth, such as the kind under consideration, is seen on the posterior fourth of the septum, for the reason that none of the turbinates touch this portion. There is an over-growth of cartilaginous structure seen on the anterior portion of the septum, almost at its anterior extremity, that at no time is in contact with an acrid-secretion-holding surface, but the history of each of such cases invariably indicates that for a long time an acrid secretion has been continuously flowing over that part of the septum, thus maintaining the irritation that is observed to always precede and maintain these growths.

The most usual site for these over-growths is opposite the left inferior turbinate. If this turbinate is large enough to touch the septum so as to maintain acrid secretion on it, a growth will be seen here; if the turbinate does not at any time, day or night, touch it, no growth will be seen. When the septal growth is small and the turbinate is seen to be not within a quarter of an inch of the septum, the only evidence of the contact during the previous night is small threads of mucus stretched across the passage from one side to the other. These slender strings are positive proofs that the two surfaces were in contact, and the position of the septal growth and the enlarged turbinate strongly indicate the relation of cause and effect. There is another proof that the septal growth is due to irritating secretion held to its surface. It has just been stated how the inferior turbinate assists to form a growth. Instances are quite common where the enlarged superior or middle turbinate of the opposite nasal passage has assisted to form a septal growth on this side. These higher growths are smaller because of the less amount of secretion held by these turbinates, and because of the secretion being less acrid.

If the inflammation now affects both sides of the lower portion of the septum, the increase of the cartilaginous or osseous structure, or both, will compel the newly grown substance to go toward the side of the greater disease, which is usually the side first affected. As this enlargement takes place, room for the increased area of the structure must be found. As it cannot force the bridge of the nose upward, or the hard palate downward, it must become deflected to one side, and that side is toward the side with the greatest inflammation.

It is seen that the septum may be deflected toward the left side in its lower portion, and toward the right side in its upper portion. I have seen these conditions certainly from one to three times every month during the last thirty-five years.

The Cause of the Deflection of the Septum. Mr. Collier, in the *Medical Press and Circular*, November, 1895, very strongly insists that the deflection of both cartilaginous and bony septum nasi is due to the partial occlusion of that side of the nasal passage that holds the growth. The breath during inspiration in a partially occluded passage causes a partial exhaustion of the air in the cavity, the tendency of which is to pull the septum over to that side, just as the air-pump would do. While I believe that he is correct in this, I think that there is *another agency* also at work, and that is

—as I have stated above—the tissue-increasing inflammatory process itself. Say that a small growth starts in the left nasal passage, the septum on the right side is still straight. As the growth increases, a slight concavity—not much more than one tenth the size of the growth—is observed on the right side of the septum. As the growth increases so does the concavity, but, be it remembered, not nearly to the same degree as does the growth. There is no doubt that the whole substance of the septum becomes involved in the growth, but the protrusion of the growth-side is always far greater than the concavity of the other side. It is seen that the tendency of the growth is to go toward the most diseased side. The instances in which the lower portion of the septum is greatly deflected to the left, and the upper portion nearly as greatly deflected toward the right, prove that I am right as to one cause of the deflection.

It is nevertheless evident that the growth causes air-exhaustion, and this air-exhaustion draws the growth toward the rarefied side, thus assisting in causing a deflection of the septum nasi. And to Mr. Collier we are indebted for this idea. This view of the matter emphasized the importance of the removal of all growths and deflections.

Diseased Accessory Cavities. Of the last hundred cases in this grade that have been under my care, about twenty had undoubted symptoms of disease of one of the accessory cavities. Of late years I am seeing a greater percentage than is here indicated; not that these kinds of cases are increasing, but that my ability to discern them is increasing. Many of the cases that were designated, fifteen and even ten years ago, as atrophic rhinitis were really a diseased condition of one or more of these cavities. Disease of the sphenoid and ethmoid cells, in connection with the appearance of adenoid growths, has been mentioned. As age advances the formation of the superior and posterior portions of the nasal cavities changes, so that the secretion does not as readily flow down to the region of the adenoids, more of it remaining on the superior turbinate process because it is partially inspissated on account of increased heat. If the accumulation is large it may affect the breath.

Locating the Disease by a Cotton Pledget. There is but one method of proving positively whether or not the accumulated secretion is the overflow of the sphenoid and ethmoid cells or is thrown off by the mucous membrane covering the superior turbinate, and that is to place a small pledget of cotton on this turbinate process, and allow it to remain there for twenty-four hours. If the process secreted the secretion the cotton will appear clean and the secretion will be under it; if the secretion came from the sphenoid or posterior ethmoid cells, then it will be on the top of the cotton.

If the anterior ethmoid cells are diseased, the outflow will accumulate, provided the secretion is thick, on the middle turbinate. The application of cotton, as mentioned above, will prove whether the secretion comes from the cells or is formed by the mucous membrane of the process.

If the frontal sinuses or the antrum of Highmore is diseased, the secretion from these cavities will lodge on the inferior turbinate process. The cotton, if applied on this process, will prove the origin of the secretion, as it did in the case of the other two turbinates.

Atrophic Rhinitis. The most prominent objective symptom of this condition is an atrophy of the mucous membrane of one or more of the turbinate processes, most generally the inferior. The membrane has passed through the stage of hyperplasia, by many called hypertrophic rhinitis, and has now become reduced in thickness because of the atrophy of all its parts, the blood-vessels, the glands, and all the other structures that form it.

There is no doubt but that there are cases that are affected with atrophic rhinitis and ethmoiditis at the same time; but a case in this grade affected with atrophic rhinitis alone almost never consults the physician for this complaint, for it will cause no more trouble than an atrophic tonsil-growth or an atrophic adenoid-growth in the pharyngo-nasal cavity.

The application of cotton to the region of the location of the secretion will positively indicate the location of the formation of the secretion. It must be kept in mind that an atrophic mucous membrane secretes but very little mucus, and but little or no muco purulent secretion. If the cotton is applied to a suspected case of atrophy, the location of the secretion (on the top of it or under it) will indicate the kind of case. If on the top, then it is one of ethmoiditis; if on the mucous membrane, so the cotton is clean, then it is a case of atrophic rhinitis. If the secretion is on both the top of the cotton and on the mucous membrane, then both diseases are present.

Erectile Tissue. This is usually seen on the anterior extremities of the inferior turbinate and on both sides of the posterior portion of the septum nasi. This growth is due to an enlargement of the blood-vessels of the part. These blood-vessels are permanently abnormal, and must be treated mechanically.

Adenoid Growths are not seen, as a general thing, in this grade; but if a continuous stream of acrid secretion from the sphenoid and posterior ethmoid cells is forced to flow down the pharyngonasal cavity because of an obstruction by a growth in one or both nasal passages, this stream, acting as it did in the infant, will continue to maintain the growth to the age of childhood and even until the sufferer reaches the adult age, as I have seen on a number of occasions.

Elongation and Enlargement of the Uvula. This is always due to excessive and long-continued inflammation. Very frequently the enlargement and elongation commence immediately after a prolonged attack of edema.

Tonsil Growths or Tonsilloids are seen in about 80 per cent. of this grade. It is not generally known that these growths are the most vacillating as to their size of any abnormal growth of the body excepting the inferior turbinate. If the patient is under treatment and in good health, the growth will shrink fully one-quarter of its size in two or three days, to again increase in size on taking cold. I have had a few cases where these growths entirely disappeared inside of three months upon the institution of nasal treatment alone. This course is not to be recommended, for the reason that the tonsil-growths are quite likely to reappear, but I give it to show the relation of the growth to the nasal disease. Sometimes there are accretions of chalky material in the body of the growth, sometimes fetid balls are formed and thrown out during a coughing spell. Frequently these balls give the breath a very disagreeable odor. Abscesses over these growths are very common.

Follicular Pharyngitis begins now to appear. These are sprouts or growths from the glandular structure of the wall of the pharynx, just as an adenoid is a growth from the glands in the pharyngo-nasal cavity, the tonsil-growths from the tonsils, and lingual-growths upon the base of the tongue. While they give rise to a tough, stringy secretion, they usually occasion but little disturbance. If the secretion from them is so much as to cause the patient to continually clear his throat, they ought to be removed; but it must be kept in mind, however, that the occasion for clearing the throat is far more frequently—ten to one—caused by secretion formed in the posterior nasal passages and the upper pharyngo-nasal cavity than from these follicles.

The Curvature of the Epiglottis of an infant is equal to a segment of a circle of about one-quarter of an inch in diameter, that of a child about one-half an inch, that of a youth about five-eighths of an inch, while that of an adult is that of one inch.

If an infant has a very severe inflammation of the throat, so as to involve the epiglottis, this organ will be so affected that the curvature that it then has will be maintained the remainder of its life; that is, the curvature of the epiglottis will not increase with the growth of the larynx but continue the curvature that existed at the time of the disease of the throat. The growth of the epiglottis will be in the extension of the arms that extend from the curved portion, so that if the free upper edge of the organ was straightened out it would measure as much as that of a normal epiglottis. The abnormality is in the shape of its free upper border.

If an epiglottis of this kind is examined with the microscope it will be seen that the perichondrium has become "thickened and more vascular, and the blood-vessels more numerous and larger in caliber. Most of the glands on the posterior surface are either in a proliferous or atrophied condition. The smaller the curve of the epiglottis, the younger was the patient when the inflammation occurred."*

If on examination of an adult patient the curvature of the epi-

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*Treatise on "Nose, Throat, and Ears," Rumbold, page 181. 1888.

glottis is equal to a segment of a circle or a quarter of an inch in diameter, then the inflammation occurred in infancy; if the curvature is equal to a segment of five-eighths of an inch in diameter, then the disease occurred in childhood, and so on.

These curvatures are permanent, and have quite a modifying effect on the voice.

Disability of the Voice.—Almost every disability of the voice is occasioned by inflammation of the pharyngo-nasal cavity. The presence of the tonsil-growths frequently has a bad effect on the voice in singing. It is not an uncommon occurrence for patients to gain from two to four notes in their singing register after treatment and operations removing the tonsil-growths.

There is an abnormal spot near the mouth of the Eustachian tube, that if touched with pharyngeal mirror, or by a medicament forcibly applied, will instantly affect the voice, and sometimes take it away altogether for a few seconds or minutes. Sometimes in the same cases, a gentle pull of the pinna of the ear will produce the same vocal disability. Very guarded promises should be given in such cases, as they frequently are remarkably slow in recovering the normal tone and use of the voice, especially in singing.

The Ears.—The inflammation of these organs is usually a continuation of that of childhood, and that back to infancy. The Eustachian tube is the part first affected. This canal may be abnormally closed—by far the most usual condition—or abnormally open, a condition that is difficult to diagnose, one to which I have given a great deal of study. It was while studying this diseased condition that I discovered the functions of the Eustachian tube.

The closure of the Eustachian tube may be acute or chronic. In this grade it is seldom acute. When it is acute the closure is occasioned by an excess of muco-purulent secretion formed in the canal, thus preventing the normal entrance of air to the middle ear and causing marked deafness. The diagnosis of this condition is quickly made by forcing air into one nostril, the other being closed; while the patient pronounces the word "what" strongly, the hearing suddenly returns. If the hearing is not increased, or is but slightly increased, then the deafness is due to a thickened condition of the mucous membrane of the Eustachian tube. Frequently inflation is an injury in these cases because of there being no mucus to dislodge.

An Abnormally Open Eustachian Tube is not frequently met in this grade, and will be described in next older grade.

Headaches are common in this grade, especially with those going to school. Very frequently headaches are only symptoms of diseased nasal passages, or diseased ears, or abnormal condition of the eyes. The abnormal condition of the ears and eyes may be due to a nasal inflammation. If there is nasal inflammation present, it may very properly be assigned as the cause of any other affection of the patient at this age. I have seen this so often and for so many years that I feel sure that it will soon be conceded by the profession generally, as it is now by those who have made the subject a study.

The very close relation of the nose to the brain will account for some brain troubles following nasal inflammation. The very intimate connections of those two organs by blood-vessels indicate this. The blood supply to the upper two-thirds of the nasal cavities, to the sphenoid and ethmoid cells and to the superior and middle turbinates is received from within the brain cavity.

The anterior cerebral artery gives its first branch, the ophthalmic, to the eye; this sends two large branches to the nasal cavities and to the cells named. The first of these branches, the posterior ethmoidal artery, passes through the posterior ethmoidal foramen, supplies the posterior ethmoidal and the sphenoidal cells, and ascending, enters the cranium, gives off a meningeal branch which supplies the adjacent dura mater, then descends and again entering the nose through an aperture in the cribriform plate, is distributed to the superior turbinate processes. The anterior ethmoidal artery, also a branch of the ophthalmic, passes through the anterior ethmoidal foramen, supplies the anterior ethmoidal cells, and entering the cranium, divides into a meningeal branch, which supplies the adjacent dura mater, and a branch which descends and again enters the nose through an aperture in the cribriform plate, to be distributed to the middle turbinate processes.

It is thus seen that the anterior portions of the meninges are stitched, as it were, by these arteries to the upper two-thirds of the nasal cavities, giving an unexcelled opportunity for the transference of diseased action from the nasal passages to the brain. And experience abundantly proves that this frequently happens.

This nasal and brain circulation also explains how it is that the eyes are frequently affected as a sequence of nasal inflammation; it also explains how it is that school children are often unable to successfully study their lessons. They cannot retain in memory what they repeatedly read over, and the mind has a tendency to wander, much against their will, from their lessons to trifling matters.

This condition of the mind is frequently called "nervous prostration," and it is generally conceded that the pupil has been pursuing his studies too arduously, and a vacation is recommended. Of course a vacation will be beneficial, but it is evident the treatment of the primary trouble—the nasal inflammation—will be far more scientific, as well as far more effective.

No healthy young person can study too arduously, or too long. Nature's restorer, sleep, comes to the rescue, and on waking in the morning the student is as fresh as ever. I fully believe that the pathological condition of every one of such students compels the brain to resist a continuance of the studies, and that it is more or less dangerous to allow this condition to continue indefinitely.

Mental Symptoms are not sufficiently frequent in this grade to require an explanation of their pathological causes.

ON BONY GROWTHS INVADING THE TONSILS.*

BY ALEX. W. STIRLING, M.D., (Hon.) M. B., C.M. (Edin.), D.P.H. (Lond.),
ATLANTA, GA.

The following three cases† are, so far as I can discern, unique in the medical literature of the English language, though one case of the kind is mentioned by Schech as having been noted from the clinical, and another from the anatomical, point of view.‡ I rather think, however, that they will yet be found to be not uncommon. They are interesting from the standpoint of the anatomist, the general surgeon, and, above all, of the throat specialist.

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*Abstract of a paper read before the Laryngological Section of the American Medical Association at the recent meeting.

†These cases were described before the Atlanta Medical Society, on June 2d, when one of them was shown.

‡Two of these cases were seen by a committee of four of the Laryngological Section of the American Medical Association, to all of whom they were a new observation.

The *first case* is that of a young lady of excellent family and personal history, but troubled for years by an enlarged and occasionally painful right tonsil, which had already been treated in different ways by several throat specialists elsewhere.

On examination with the finger I was able to make out a hard, immovable substance, coming from behind the tonsil forward underneath it to the level of its anterior surface, but forming practically a part of it. Its point is rounded, apparently about the eighth of an inch in diameter, but becoming broader and somewhat flattened laterally as it goes outward, backward, and slightly upwards. The finger pressed in front of it enters an angle formed by it and the inferior maxilla, and when pressed behind it enters another angle formed by its approximation to the right side of the vertebral column. Nothing of the kind can be discovered on the left side.

The *second case* is sixty-four years of age. On examining her throat I observed a slight protuberance just above and in front of, but involving, her right tonsil. The finger showed it to be nearly the same as that already described, with the following points of difference: it exists in the second case on both sides, though it is not quite so prominent upon the left; it is also higher, farther forward, and perhaps a little thinner, and with a more upward direction, in the second case.

This patient has never had the slightest trouble with her tonsils.

In one of her daughters whom I have examined this condition of the throat is not present.

The *third case* is a brother of the second, and sixty-five years old. He likewise has been free from throat affections, but on both sides he has the peculiarity under discussion. The hard substance in him is altogether in the posterior part of the tonsils, is much longer and reaches a full finger-breadth below the level of the lower border of the tonsil, is perhaps more slender than those already described, and is for about half an inch of the lower end on either side cartilaginous to the feel and movable.

These are evidently not tonsillar calculi, neither are they the result of disease; they can only be congenital peculiarities, having, however, a distinct interest in cases of disease in their neighborhood.

If they came from the lower jaw, to which they closely approximate, they would move along with it, but this they do not do.

They do not come from the bodies of the vertebræ, because the finger can exclude these. The pterygoid plates are too far forward, and the spines on the posterior extremities of the wings of the sphenoid are also too far distant. By a process of exclusion the transverse processes of the vertebræ and the styloid processes alone remain.

The tonsil is situated on the level of the upper part of the body of the axis, or of the disc between it and the atlas. The transverse process of the axis is small, and does not move on motion of the head: the bones under consideration do move along with the head, and come into much greater and visible prominence when the head is moved toward the side opposite to that under examination. We are therefore reduced to the atlas, which is, as regards relation of the head, a part of it, and the styloid process. The only way of which I can think to distinguish between these is that the styloid process would move with the head on nodding and the atlas would not; and as these bones do so move, I conclude that we have to deal with elongated styloid processes somewhat diverted perhaps from their normal direction.

The only case in which the question of *treatment* arises is the first. The tonsil is here troublesome, but I prefer to leave the bone untouched, and rather fear to remove any of the tonsil itself, because of the likelihood that it might, on contraction, become tightly stretched over the end of the bone, and adherent to it, or that the bone might ulcerate through.

LET your most trusted assistant administer the anesthetic. Any intelligent person is able, with a little direction, to assist at the wound, but it requires skill and experience to anesthetize thoroughly and safely.—*Internat. Journal Surgery.*

COAL TAR ANTIPYRETICS.*

By J. A. MARTIN, M.D., Indianapolis, Ind.,

Assistant Professor of Chemistry at the Medical College of Indiana.

The great difference of opinion regarding the virtue of antipyretics of the so-called coal-tar derivation has led me in the past few years to make a close study of this group of medicines.

I shall make it the object of this paper to show the relation existing between the various important members of this group from a chemical, physiological, toxicological, and therapeutic standpoint.

Omitting the discussion of all mechanical mixtures, "anti-this" and "anti-that," which are products of uncertain composition, and are Dr. So-and-So's "favorite prescription," I shall adhere strictly to products of distinct and known chemical composition, such as antipyrin, acetanilid, phenacetin, and lactophenin.

The majority of these products are chemically derived from the first member of the benzene series of hydrocarbons (C_6H_6), benzene, through its mono-atomic alcohol or phenol (C_6H_5OH), carbolic acid.

Carbolic acid itself acts as an antipyretic in two ways: first by diminishing the production of heat; secondly, by increasing the dissipation or radiation of heat. The exceedingly poisonous and caustic properties of phenol have caused a very limited use of this product as an antipyretic, it having been superseded by its milder and equally efficient derivatives.

The characteristic symptoms of an overdose of carbolic acid are briefly, clonic convulsions, dyspnea, free salivation, lachrymation, conjunctivitis, diminished sensibility, and reduction of temperature. Albuminuria and hematuria are sometimes produced. The *chief* characteristic of the action of phenol is *reduction in arterial pressure.* It paralyzes the vaso-motor centers, and later markedly *depresses the heart,* though death from this drug is usually due to *paralysis of respiration.*

The chemical relation of antipyrin to phenol is shown by its being produced by heating phenyl-hydrazin (C_6H_5NH, NH_2) with diacetic ether $\left(\begin{smallmatrix}C_2HO_2\\C_2H_2(C_2H_3O)\end{smallmatrix}>O\right)$, when the product is mono-methyl-oxy-quinizine, in which by the replacement of one atom of hydrogen by another methyl group (CH_3) di-methyl-oxy-quinizine is formed, which has been given the name of antipyrin on account of its opposition to fever.

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*Read before the Alumni Association of the Medical College of Indiana, March 31, 1896.

Antipyrin was a great improvement as an antipyretic over its predecessor in the coal-tar field, carbolic acid, in that a caustic, poisonous liquid was supplanted by a non-caustic, crystalline powder, soluble in less than its own weight in water, though still retaining many of the physiological and therapeutic properties of phenol.

The great trouble with antipyrin is that it retains *too much* of the *poisonous properties* and *depressing effects* of phenol.

Regarding the nervous system, toxic doses of antipyrin seem to exert a peculiar influence upon the cerebral cortex, as is indicated by the stupor and coma which are noticed. It peculiarly stimulates, then depresses the spinal cord. It is an extreme depressant of the sensory nerve trunks.

Regarding the circulation, antipyrin, in therapeutic doses, increases arterial pressure, while toxic doses lower the pressure. It has been proven to be a *direct paralyzant to the heart of the frog.*

Toxic doses of antipyrin first increase, then markedly *decrease the respiration.*

The common symptoms seen in antipyrin poisoning are ataxia, paraplegia, humid respiration, convulsions with general rigidity, dilated pupils, unconsciousness, and a fall of temperature.

When death occurs, it seems to be due to *failure of respiration.*

The poisoning is due to the action of the decomposition products of the drug upon hemoglobin, to which substance is largely due the condition of cyanosis.

The frequency of an existing idiosyncrasy to antipyrin makes its promiscuous administration very dangerous, since very small doses have produced very alarming conditions.

Acetanilid (C_6H_5NH,C_2H_3O) traces its relation to phenol through phenylamine or aniline ($C_6H_5NH_2$), in which one atom of hydrogen is replaced by the acetic acid radical (C_2H_3O), acetyl.

It is made by boiling together, for a day or two, equal weights of pure aniline and glacial acetic acid, acetanilid and water resulting. When given in large doses, or to persons having an idiosyncrasy for the drug, acetanilid produces symptoms very similar to those produced by antipyrin, except that the sweating, which does not always occur in either case, is as a rule more profuse following the administration of antipyrin, while the cyanosis is more pronounced following the use of acetanilid.

The latter condition may be explained by the fact that both the decomposition products of acetanilid (aniline and glacial acetic acid) act as deoxidizers upon the blood, both tending to convert the bright-red oxyhemoglobin into the bluish-purple met-hemoglobin, thus preventing the proper oxidation of the tissues.

Usually when acetanilid is given to patients suffering from fever, there is a more decided fall in the *pulse rate* than in the temperature, though both are decreased. Not only the pulse rate, but the size of the pulse is decreased, even to the extent of becoming thready.

This proves acetanilid to be a direct *cardiac depressant.*

Acetanilid produces a fall of temperature by decreasing heat production.

Phenacetin, or acet-para-phenetidin ($C_6H_4{<}^{OC_2H_5}_{NH(C_2H_3O)}$), is derived from para-phenetidin ($C_6H_4{<}^{OC_2H_5}_{NH_2}$), which is the ethyl ether of amido-phenol; this later is derived from mono-nitro-phenol ($C_6H_4{<}^{OH}_{NO_2}$), it in turn being derived from phenol (C_6H_5OH), or carbolic acid.

Phenacetin acts as an antipyretic by lessening heat production, through an influence on the nervous system, and without alteration of blood pressure.

Though the blood pressure is not affected by phenacetin, not infrequently a condition of cyanosis is observed where large doses of this drug have been administered. This action is undoubtedly due to the action of one of its decomposition products, probably acetic acid, upon hemoglobin, as in the case of antipyrin and acetanilid poisoning.

The only unpleasant symptoms usually seen following the use of phenacetin are, too profuse sweating, slight ptyalism, slight weakness, dizziness, and dyspnea. In rare cases phenacetin is found to produce collapse, marked cyanosis, great dyspnea and restlessness, cold perspiration and dilated pupils; but these symptoms are always followed by recovery.

Lactophenin ($C_6H_4<^{OC_2H_5}_{NH(C_3H_5O_2)}$), or lactyl-para-phenetidin is related to phenol in exactly the same way as phenacetin, being derived from para-phenetidin.

Lactophenin differs from phenacetin merely in the acid radical; *i. e.*, lactophenin is produced by the replacement of one hydrogen atom in para-phenetidin by the lactid acid radical ($C_3H_5O_2$), lactyl; while in phenacetin the same hydrogen is replaced by the acetic acid radical (C_2H_3O), acetyl.

Lactophenin is a white crystalline powder, much resembling in appearance the other members of this group.

Its action though rapid is not abrupt.

The antipyresis produced by lactophenin lasts for from four to six hours, while the subsequent rise of temperature is not accompanied by shivering and other unpleasant effects.

The hypnotic and analgesic effects of this drug are *decidedly more pronounced* than produced by either phenacetin, acetanilid or antipyrin.

Lactophenin, like phenacetin, has no *effect upon respiration or circulation*, but reduces body temperature by lessening heat production, *through an influence upon the nervous system.*

Cyanosis has never been known to follow the administration of lactophenin, since none of its decomposition products have any effects upon hemoglobin.

It seems to me that the keynote was struck when the idea of introducing into para-phenetidin a lactic acid radical, instead of an acetic acid radical, was evolved; thus producing an antipyretic which has no action upon either the respiration or circulation, and at the same time produces no poisonous effects whatever.

In my opinion the day is not far off when antipyrin will be almost wholly discarded, on account of the uncertainty of the degree of its action, and on account of its incompatibility with a large number of drugs in common use; acetanilid will find a home with the surgeon as an antiseptic dressing; and phenacetin, which has done a noble work as a forerunner, will give way to its younger and more worthy brother, *lactophenin.*

SOCIETY REPORTS.

ATLANTA SOCIETY OF MEDICINE.

ATLANTA, GA., March 3, 1896.

In the absence of both the President and Vice-President, Dr. V. O. Hardon was called to the chair.

The regular order was a discussion of "Normal Labor."

DR. F. B. MCRAE: *Previous preparation of the patient, etc.* As I consider it, the preparation should begin at least a month before confinement. I see that the secretory and excretory organs are doing their work, and that the food is of the right kind and is taken up by the system properly. This would bring us up to the confinement, and would again be sure that the bowels and abdominal organs were in proper condition. The main thing is to have the kidneys in order, and we would expect trouble from them if they are not looked after. I always examine the urine to ascertain if there is any albumen or anything of that kind. To correct that I use bromide of sodium, and also a little chloroform. Usually the bromide is sufficient. When the patient comes up to confinement, if possible, I have prepared a room distant from the street, with plenty of light and ventilation, and with as little in the room as possible. I prefer a cotton pad on the bed, and I do not believe in taking a pad from one bed to another. I use a different pad for each patient, and destroy it afterward. I have an oil-cloth over the pad. I see that everything is as simple as possible, and eliminate as far as possible all heavy diet for several days previously. In regard to nurses, I have a great deal of trouble with them. The worst trouble is that some families who have had, still have, and intend to have, some old colored nurse. These I find very hard to do anything with, as they have very set ideas. I always try to have a couple of white nurses that I can depend upon. I like to have them see that the clothing, bed linen, and everything else is ready, and to see to the means of getting rid of the excretions. I do not give vaginal douches, but of course I see that the body is bathed properly. The secretions of the vagina are there to facilitate labor, and should not be removed.

DR. E. H. RICHARDSON: *Management of the first stage of labor.* The duty of the accoucheur in the management of the first stage of a normal labor is one of expectancy and watchfulness. Therefore the duty assigned to me to open this discussion on the management of the first stage of labor is an exceedingly simple one, and necessarily circumscribes our field of observation. It very often happens that we see our obstetrical cases for the first time during this stage of labor. It is perhaps a supererogation to say that the obstetrician of to-day should be equipped and prepared to meet the gravest problems incidental to the most untoward labor. His armamentarium should contain chloroform, ether, a thumb-lancet, veratrum viride, morphine, a hypodermic syringe, a silver and elastic catheter, Elliot's forceps, silk thread, a needle holder, tablets of mercuric chloride, iodoform gauze, carbolic acid, a few large sponges, Barnes's dilators, a Davidson's syringe, brandy, etc. Supplementary to this list, perhaps a modern surgeon's pocket-case of instruments will be sufficient to meet the ordinary requirements of most contingencies that might arise. Regardless of the view any one has taken in the past concerning the value of antiseptic midwifery, its importance can no longer be questioned. The diminished mortality since its principles have been adopted in the maternity hospitals of Europe and America is conclusive testimony in its favor. The clothing and person of the accoucheur should be eminently clean. His hands and arms having been well washed with soap and nail-brush, they should be immersed in a one to two thousand solution of bichloride of mercury. If the information has not been previously obtained, the first duty of the obstetrician is to obtain a correct history of the case. He should quickly satisfy himself as to the character of the subject he has before him, whether or not the patient is in a fair state of health, or the contrary; the family history, history of previous labors, and her present condition should be ascertained. The hands emerging from the bichloride solution of mercury may now be lubricated with a three per cent. solution of carbolic acid and glycerine, and a vaginal examination, coupled with external palpation, is now instituted. By the combined method the exploration should be sufficiently thorough to ascertain the presentation of the child, its condition, whether living or dead, the condition of the pelvis, uterus, amount of dilatation, condition of bladder, perineum, and rectum. In European hospitals, on admission into the maternity department, each patient's pelvis is examamined and measured, but in England and America pelvic deformities are so rare that this precaution is not deemed necessary. The woman should be directed to empty her bladder at regular intervals, and the nurse should flush the rectum with a copious enema and see that it is well emptied. It has been determined that the patient is at the end of the utero-gestation, and that the pains are genuine labor pains. False pains are distinguished from true pains of labor by their location in the abdomen, irregularity in time and severity, the absence of "show," and the absence of dilatation of the cervix uteri. The pains of the first stage of labor are lancinating, cutting, and teasing. Each pain is the expression of a uterine contraction which begins at the internal os, and is nature's method of dilatation, and gradually extends outwards until the *vis a tergo* forces open the external os, the diameter of which is increased and its lips thinned out until large enough for the reception of the body of the child. It has been well said that "the essential prerequisites of the skillful and successful obstetrician are competency, deliberation, alertness, promptness, and self-possession. Should our investigations reveal to us that we are confronted with such grave complications as placenta previa, an abnormal presentation, eclampsia, stenosis of vagina or uterus, or a dead child, interference should be immediate. A supine, waiting attitude, in view of the evil consequences to mother and child now, would be both ignorant and culpable. But if everything relating to mother and child in this stage is normal the accoucheur has but little to do. When dilatation is complete, the dilatation being from three to three and a half inches, the amniotic sac usually bursts spontaneously, and the second stage of labor is ushered in by a gush of water which is collected by the large sponges placed at the osteum vagina for the purpose. Should the bag of waters not break spontaneously after they have subserved their purpose, if the finger nail, during the acme of a pain, is pressed firmly against the distended membranes, the sac is easily ruptured. Up to this time the patient has not been restrained from walking, sitting, or regulating her own movements. She has been allowed to eat and drink *ad libitum*, and the physician who has not heretofore been constantly present with the patient now has her placed in bed, and as the pains have become expulsive and more frequent, she is directed to aid the expulsive movements by bearing down, and during the pains chloroform is administered. In this way chloroform may be given with impunity. Bedford Brown is authority for the statement that in all medical literature not more than forty cases are reported of deaths from anesthetics administered during labor.

DR. J. W. DUNCAN: *Management of the second stage of labor.* I had no idea at all of leading the discussion on any point. Dr. Richardson has said more than I thought could be said on the first stage of labor; but he left out one thing I would use, and that is the chloroform. I get better results in the first stage than in the second. It facilitates the dilatation of the os; and after the first stage has passed, if the woman is not very nervous and does not make unusual complaint, I do not give the chloroform. In the second stage and after the membrane has ruptured, we ascertain the position of the head, and if there is any deviation from the normal we try to rectify it. After it has engaged the pelvis there is very little to do until the head begins to press upon the perineum. Then I give some aid in dilating the perineum. It may not benefit in some cases. As the head presses down firmly and dilates the perineum, I retard the advance of the head to some extent. In some cases this is absolutely necessary. Where the pains are very strong I think it best to retard the progress of the child and let it be distended gradually. At the first presentation I elevate by pressing firmly just below the coccyx. In some cases I have found it necessary to pass two fingers into the rectum and in that way bring the head forward and have hurried labor. There are some cases in which the cord is wound around the neck one, two, and sometimes three times. Then when the pain subsides the head recedes back to where it commenced. I have had cases where the child would advance and recede for an hour or more, and I would then pass two fingers into the rectum and get them under the chin and hold them that way, and at the next pain the head would be born and I would then release the cord from around the neck. This is not normal, but is so frequently the case that it is not unusual. My plan has been not to be too hurried about the use of forceps. After the first stage has passed and the second stage has commenced in the usual way with the exception of sufficiently strong pains, I have been inclined to wait three or four hour before using the forceps, and I believe that is the best plan in most cases. In my mind, about four hours should elapse before using the forceps. In some cases I would not wait so long, but would be governed according to the case. The delivery of the shoulders is usually not a very difficult thing. In some cases if the shoulders are delayed it is well to pass the finger into the axilla and bring down one arm and then the other. Where the shoulders are large and the pelvis contracted we have some difficulty, but I have not had many cases where it was necessary to deliver an arm before the shoulders were passed.

DR. VANGOIDTSNOVEN: *Management of the third stage of labor.* The third stage of labor is occupied in the expulsion of the placenta. In a spontaneous, normal, or natural labor it would seem that the task or duty of the obstetrician is plain, and that is, to let nature take its own course, labor being a physiological act. But it is evident that he should be on his guard to the last; for although the two first stages may have passed normally and satisfactorily, he should remember that "all is well that ends well," and that the third stage is liable to multitudinous accidents and complications. He cannot, therefore, at the incipiency of the last stage congratulate himself upon a complete success predicated upon the favorable conclusion of the first two stages. Immediately after the delivery of the child, the woman is either plunged, as it were, into a momentary interval of relief and repose, or somewhat disturbed by the fear of new pains. I have often thought that this suspension is due to a momentary paretic condition of the uterine walls consequent upon the violent contracting pains that have been wrought in the fetal expulsion. The length of the delay is generally in inverse ratio of the physical strength and nervous condition of the patient. Experience shows that if the expulsion of the after-birth is left to the uterine and vaginal contractions, in very few cases this spontaneous delivery is effected with rapidity; whilst in others delay is more or less required, one, two, and even five or six hours after the birth of the child. In rarer cases spontaneous expulsion cannot and will not occur, and artificial delivery having become necessary shall be rendered the more difficult proportionately to the time spent in waiting, retraction of the internal orifice having then taken place with considerable energy. It follows that delivery must always be aided though not forced. Certain delay is necessary for coagula to form within the uterine sinuses. This requires a reasonable time, from fifteen to twenty minutes. Unfortunately it is too often the case that the practitioner's attention at this stage of labor is fixed mainly on the hasty delivery of the placenta, even before the contractions of the womb take place and close the uterine sinuses and mouths of vessels, thus exposing the patient to serious and even fatal loss of blood. Extraction of the after-birth is contrary to the laws of natural and spontaneous labor, and it is too often resorted to by the practitioner who is in a hurry to get through. In pulling and jerking at the placenta he uses the *vis a fronte.* Nature does not pull but contracts and uses the *vis a tergo.* In view of the above mentioned danger, the practitioner's method is hardly anything short of criminal temerity. For it may produce, first, copious hemorrhage from partial detachment of the placenta; second, inversion of the uterus; third, separation of the cord from the placenta; fourth, irregular or hour-glass contraction of the uterus; fifth, septic poisoning and phlebitis caused by the retention of placental fragments, portions of membranes and clots which may remain behind. Ordinarily, as soon as the child is expelled, I pass my hand over the abdomen of the patient to ascertain first, if there be another child; second, if there be fibrillary contractions of the uterus. In the latter case the womb forms a firm rounded mass lying in the lower part of the abdominal cavity. I then feel satisfied that placental delivery is soon to take place and if the case be left to nature a miniature labor readily ensues. Through retraction of the internal surface of the placenta its attachments are easily separated; this mass remains in the cavity of the uterus as a foreign body. Pains immediately follow, and the placenta is spontaneously expelled from the uterus into the vagina or even externally. It is claimed by some authorities that when the placenta is drawn out in the way too generally practised, it obstructs the aperture of the os and acting like a piston of a pump, produces a vacuum and tends to promote hemorrhage. In the majority of cases, when the after-birth is detached from the uterine walls it either lies on the os or in the upper portion of the vagina, and is likely to remain there even for several hours, but for the assistance of the obstetrician. When retained in the uterus after its detachment, the placenta is buttoned, as it were, within the orifice. It should be dextrously unbuttoned by bringing its edge to the button-hole as you would do with your coat button. If the after-birth be retained in the vagina, a slight twisting of the cord around the fingers of the right hand whilst the fore and middle finger of the left hand are passed up to the insertion of the cord and used as a pulley, is all that is sufficient to make a slight traction and bring the after-birth away. Before extracting the placenta entirely, it is well to turn it around several times in order to twist the membranes which in this case are so liable to be torn, and consequently to be left behind in greater or less portions, which might occasion serious and complicated disorders.

Immediately after the delivery of the placenta and secundines, I douche the vagina and frequently the uterus with half a gallon of warm water to which I have previously added an ounce of Darby's prophylactic fluid. Any portion of placenta or of membranes or clots which may remain behind is thus disinfected and induced to leave. Should the placenta not come away within a reasonable time after the birth of the child, I use Cazeaux's method, which he calls "expression." To effect "expression," says Cazeaux, the physician should sit by the bedside with the hand on the uterus in order to secure contraction and prevent distention. The fundus should be grasped in the hollow of the left hand, the ulnar edge of the hand being well pressed down behind the fundus, and when the uterus is felt to harden strong and firm pressure should be made downwards and backwards in the axis of the pelvic brim. If this maneuver be properly carried out and sufficiently firm pressure made, in almost every case the uterus may be forced to expel the placenta into the bed along with the coagula that may be in its cavity. Another *modus operandi* which has proven highly satisfactory and successful is the application of Faradic electricity, the positive electrode being applied immediately below the umbilicus and the negative to the os. Strong contractions immediately follow, and delivery almost invariably results. When the placenta or any portion thereof cannot be moved in the ways just mentioned, the case ceases to be one of normal labor."

DR. J. E. SOMMERFIELD: *After-treatment of labor.* With the expulsion of the placenta the after-treatment begins. The hemorrhages should be prevented, usually by rubbing the uterus from the abdominal walls. When all danger of hemorrhage ceases the places are washed and the patient placed in a clean bed. The external parts are examined, and if lacerated I sew them up. Then the pad is placed before the vulva to receive the discharge. After the cord has been tied and severed, the child is usually greased with lard or oil and washed in a bath of ninety-eight degrees temperature, and examined for any malformation that may be present. Then the room is darkened and the patient allowed to sleep. I usually allow them to sleep from six to ten hours. When they awake I urge the patient to pass urine. Should the quantity be very small, or the patient unable to pass any, a small catheter is employed, first washing the external parts. If the patient is unable to void urine, this is done two or three times a day. The external organs should be washed every day. The vaginal injections are sometimes given, but in normal cases I never employ these. After ten or twelve hours, after the patient has had a refreshing sleep, I usually have the child to nurse. No matter how small amount it receives, it is better than artificial food. I then let it sleep. I have the child to nurse every few hours but never let it nurse at night, so as to let the mother have as much rest as possible. I give liquid diet, and on the third day I give the laxative. The dressing of the patient will be painful until about the fourth day. Before nursing the child the nipples are thoroughly cleansed, and should they be painful sub-acetate of lead is used. As for visiting the patient, I make it a rule to go twice a day for the first few days, and after that once a day. The time the patient should remain in bed is according to the local discharge. It is usually from one to ten days; letting her sit up when not fatigued.

DR. DUNBAR ROY was requested to discuss *Ophthalmia Neonatorum.* He spoke as follows: One method of treatment consists in simply douching the vagina thoroughly with a one per cent. solution of creolin for two weeks before the birth of the child. This is easy of manipulation and the results are very satisfactory. They are just as good as those where Crede's method is used. His method is at the birth of the child to drop in a drop of nitrate of silver solution, ten grains to the ounce. This is no better than some other methods that have been tried. In fact, I have found that the dropping of a ten-grain solution is too strong to use in a child's eye, and also sets up a mild conjunctivitis and leaves the eyes subject to infection. One grain would be sufficient, and I found it just as good as you would want to use, although five grains does not set up an irritation. But I also used what I found to be just as good and somewhat better, and that was simply the washing off of the eye thoroughly with a spray of 1 to 5000 solution of bichloride of mercury. I have noticed cases which were not caused by opening the eyes in the uterus or the vagina, but by the material sticking to the lids, and which got into the eyes as soon as they were opened. Hence I tried the method of simply washing the eyes with the 1 to 5000 bichloride of mercury, and out of fifty cases we had only one case of ophthalmia neonatorum It was just as good a record as has been made by the use of nitrate of silver. My experience has been that the vaginal canal should be douched two weeks before the delivery with a solution of creolin, and at the birth to wash the eyes with the bichloride solution, and let some get into the eyes, but very little. When ophthalmia neonatorum once sets in the eye cannot always be saved.

DR. VIRGIL O. HARDON: The ground has been covered so completely that there is very little opportunity for me to say anything more. As far as concerns the management of normal labor during the labor, there is very little to be done. There are more sins of commission than omission, as has been said, but we never know when a case is going to be normal. More attention should be attached to the case before the labor comes on than at the labor. I think that the way to prepare a woman is to begin at puberty. I will not discuss this point however to-night, although it may be shown to have a very direct bearing on the subject. I always insist on the patient letting me know before the child is expected, as I want to begin with my patient as early as the fifth or sixth month. Those things which conduce to the general well-being of the mother will conduce to the success of labor. This includes proper diet, exercise, proper clothing, and strict attention to the condition of the bowels and the kidneys. Constipation is the bane of pregnant women. There is no invariable plan of treatment, for one woman would thrive on one treatment and another on a different treatment. We have to be governed by the idiosyncrasies of the patient. It is of prime importance that we know whether there is albumen in the urine. I think that puerperal eclampsia could be almost stamped out if every patient three or four months before the labor would get perfect action of the kidneys.

In a normal labor after determining the presentation I do nothing more for the patient until the rupture of the waters. I go to sleep if at night, and have the nurse to call me as soon as the rupture takes place. Then I make another examination and ascertain how near the head has approached the perineum, and if the pains are normal pains, I let them go on for a while and make an examination in half or three quarters of an hour. I think that considerable can be done in normal labors toward preventing the rupture of the perineum. I think that the suggestion of Dr. Duncan of preventing the head from coming too fast is a good one. Another important thing is to keep the head in a state of flexion until the occiput is out beyond the pubic arch. In the third stage of labor I believe in the same plan that we use all through labor. Let nature do the work. If we aid in the expulsion of the placenta, we should do it by pressure, as I do not think any harm can be done in that way unless we use severe force. There is nothing to be gained in getting the placenta out in two minutes, instead of one hour, except in saving time for the patient. If we shorten the third stage half an hour we have brought the patient into a comfortable position so much the sooner. After the placenta has been expelled I keep my hand on the womb to keep up the uterine contraction. I usually continue the pressure for an hour, which also prevents the accumulation of blood-clots. By doing this we diminish to a large extent the severity of the after-pains. About the after treatment there is not much to be said. I do not use any vaginal douches either before or after labor if the case be a normal one. The examining finger should always be surgically clean. There is one point of considerable importance. Whenever the patient empties the bladder or bowels I have her raised to an upright position in the bed. This gives the best possible drainage for the patient. When the patient is lying down the drainage is imperfect and may influence the possibilities of the retention of septic products in the vagina. I do not believe in auto-infection in labor. I think the germs are from without and their inward course is facilitated by the imperfect drainage. I put the child to the breast the first day, as I think it promotes uterine contraction. I believe also from observation that unless we put the child to the breast the first day there is a liability of its losing the instinct of nursing to a certain extent. I may be mistaken in regard to this, but I have seen some cases which seemed to confirm this view. In delivering the shoulders I deliver the anterior one first, and I have found that a valuable way to do this is to grasp the body of the child by the neck or the head, and to press the whole body backward against the perineum, pressing the posterior shoulder into the hollow of the sacrum until the anterior one is born. I think that laceration of the perineum occurs as often from the shoulders as from the head. It has been proven by watching closely and seeing that the head did not produce any laceration but after the child was delivered the perineum was found to be lacerated. I do not give chloroform in the first stage of labor. I have found that women bear the pains of the first stage better than those of the second stage. Although they complain more in the first stage, yet they talk more and appear to have more vitality, but not so in the second stage, which seems to exhaust them rapidly. I give chloroform in the second stage of labor, giving it only during the pains, but its effects sometimes persist between the pains. I aim to keep my patient absolutely unconscious when the head is passing through the vulva. I do not use a binder, but I do not discourage the use of it. My experience has been that it does not do any good or any harm, and most patients do not want it. If I had a patient with a womb which was inclined to relax I might use it, but even then I would have my doubts. I do not think we would get much pressure from the binder unless we had a thick pad beneath it. I think it is apt to displace the uterus downwards. I do not encourage the use of it.

I have everything that is soiled changed and have everything clean about the patient, and have a clean napkin placed over the vulva to be changed as soon as soiled.

W. L. CHAMPION, M.D., *Secretary.*

THE EFFECTS OF LACTATION ON MENSTRUATION AND IMPREGNATION.

1. Of nursing women, 57 per cent. only have absolute amenorrhea.
2. Forty-three per cent. menstruate more or less, but twenty have absolute regularity.
3. Impregnation does not take place so readily during lactation as at other times, but this is not true to such an extent as has been imagined.
4. If absolute amenorrhea is present during lactation, the chances of impregnation occurring are only six out of one hundred.
5. If menstruation occurs during lactation, the chances are sixty in one hundred.
6. The more regular a woman is during lactation the more likely is she to become pregnant.
7. During a menstruating lactation the changes in the uterus are presumably similar to those connected with the ordinary monthly periods, and the mucous membrane forms a nidus for the ovum.
8. In the woman who does not suckle at all, the menses appear, as a rule, some time in the first six weeks after delivery.—Abstract of a paper by Dr. L. Remfrey, before the Obstetrical Society, London.—*Canada Med. Record.*

EDITORIAL.

The office of the Business Manager of THE JOURNAL is Nos. 311 and 312 Fitten Building.

The editors are not responsible for views expressed by contributors.

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Reprints of articles will be furnished, when desired, at a nominal cost. Requests for the same should always be made *on the manuscript*.

ANNOUNCEMENT.

The managing editor of the JOURNAL is now absent in New York, engaged in post-graduate medical study. Until his return, and until proper notice appears in our columns, the editorial and literary department will be managed by Dr. A. W. Stirling, whom we take pleasure in commending to our readers as eminently qualified for the work which he has kindly agreed to assume in his absence. In Dr. Stirling's hands we know that the interests of this department of the JOURNAL will be conserved. L. B. G.

JENNER.

In considering the history of the discovery of vaccination, one is struck by the special preparation through which Jenner had passed, peculiarly fitting him for his life-work. For this discovery was not a matter of accident, a moment's insight and the thing completed, the preventive properties of the cow-pox having long been known to the milkmaids of his district without benefit to others. It required something more than this barren knowledge: it required Jenner's training, grafted upon his exceptional character, to stop the greatest scourge of his time. His love of natural history could not have received a stronger impetus nor his studies a better oversight than in the house of John Hunter, with its menagerie and specimens of all descriptions. His intercourse with such a man, which continued until Hunter's death, must have exerted great and beneficial influence on the pupil's mind. "Do not think, but try; be patient, be accurate," was some of the advice which he received; and Jenner thought and tried for years before he was satisfied with his investigations, which culminated one hundred years ago, on May 14th, in the first vaccination. Before this time smallpox destroyed, maimed, or disfigured about one-fourth of mankind. In England, the average annual mortality from smallpox per million, during the ten years between 1885 and 1894, was 26, while last century it was fully 2,000, and the decrease has been similar in other countries. That this is not due to a "natural decline of smallpox" is evident from its virulence in countries where the people are not properly vaccinated, such as in Russia and in Spain. While in 1889 the rate in Germany was 4, that in Almeria was 3,080.

The recent outbreak among the anti-vaccinators of Gloucester, England, Jenner's own county, speaks for itself.

Anti-vaccinators have urged that improved sanitation accounts for the admitted low mortality of smallpox in these days, but no unprejudiced person can accept that theory. Prussia and Austria had advanced in about equal degrees in sanitary matters, but in 1874 vaccination became compulsory in Prussia, with a sudden and striking fall in the death-rate from smallpox. Austria has shown no such change in the rate of mortality. Further, improved sanitation affects all ages alike, while the reduction in smallpox mortality has not affected all ages alike. Before primary vaccination, the burden of smallpox fell chiefly upon infancy; but vaccination has thrown that back to a greater age, and now more adults die of smallpox than in the early days of vaccination. What is necessary for a practically complete immunity throughout life is a second vaccination during school-life. In a well vaccinated community, such as that by which the Prussian army (in which revaccination is compulsory) has been surrounded since 1875, revaccinated masses of people have been proved to be practically absolutely safe against smallpox. When the present mistaken ideas of freedom which prevail in certain countries have given way to an understanding that every man is to some extent his brother's keeper, and that infectious disease affecting him is a menace to others, we shall have not only vaccination, but revaccination compulsory. It lies with the medical profession to see that the above facts are recognized by the public, and to urge the adoption of a vaccination law.

Jenner opened the door for all the later inoculators. While they are striving to prevent and cure the host of the remaining ailments of the human and lower races, it is pitiable to see his, the greatest discovery of all, still, at the end of a hundred years, bearing only a little of the fruit it ought to bear, and that from a mixture of ignorance and prejudice among the laity, and a lack of energy among medical men, who take care, however, that they themselves are freely vaccinated.

To all who feel an interest in Jenner and his work, we recommend the *British Medical Journal* for May 23d, which contains half a dozen good pictures of the famous physician himself, and others of the place of his birth, his memorial window, etc., as well as *fac simile* reproductions of letters of interest. Over fifty pages are given up in this "centenary number" to Jenner and vaccination, and among its most valuable contributions are the thirty chromographic reproductions of George Kirkland's colored drawings of vaccinia and inoculated variola, placed side by side at the various stages of their development. These represent conditions nearly precisely similar up to the third day. On the fourth, the already slightly greater reaction on the smallpox arm is becoming more marked. This becomes daily visibly accentuated, till on the 8th the large yellow patch is surmounted by numerous new vesicles and much inflammation, both of which develop for six days longer, when the drying-up stage begins, and by the sixteenth day inflammation has nearly gone and hard crusts alone remain.

DR. SAMUEL LLOYD, of New York, who will be pleasantly remembered by those who were present at the recent meeting of the State Association in Augusta, on account of his social as well as of his professional qualities, has contributed a full review of that meeting to the New York *Postgraduate.* He concludes by saying: "Looking back at the meeting one cannot but feel that the average of the work done was of a most superior character. It compares favorably with any meeting of the New York State Medical Society that I have attended, and there can be no question that, aside from the rest that one gets by a trip to these State Societies, a great deal of information may be gathered if the rest of the State Societies are of an equally high average as that of the State of Georgia."

IT is reported that a lady has presented the French Academy with 800,000 francs, the interest of which is to go to any one who will discover a cure for consumption. It says a good deal for the high reputation for disinterestedness of physicians among the laity that there has not long ago dangled such a prize before the medical eye for every known dangerous or painful disease. While quite agreeing that doctors are the least mercenary of mankind, we should yet welcome international subscription lists with such an object, for the desire for a life-long competence might stimulate to research some who otherwise would merely jog along. Still more profitable would it be if such funds were invested in the support of more numerous pathological laboratories and of the men who work in them.

SELECTIONS AND ABSTRACTS.

GENERAL MEDICINE AND THERAPEUTICS.

CYCLIC ALBUMINURIA.

Pierre Marie (*Sem. Med.*, February 5, 1896) reports a case and discusses the subject. He defines the disease as albuminuria, (1) occurring in apparently healthy subjects, (2) being intermittent in its course, and (3) subject to certain conditions. As regards (1), the discovery of albumen may be perfectly fortuitous, or the patient may suffer from general debility, heaviness of the limbs, palpitations, headaches and hemorrhages (epistaxis or hemoptysis). (2) Intermittence: many healthy persons may have transitory albuminuria under certain conditions. Hwass found albumen in 98 out of 635 apparently healthy soldiers (15.4 per cent.), the quantity of which was not influenced by exercise. Capitan and Spiegler found albumen, probably from reflex causes, always present in one hundred cases of scabies. Thus transitory must be distinguished from true cyclic albuminuria. (3) Conditions: it is doubtful whether cases which are influenced by food or cold are examples of this disease, for in perfectly typical cases they have often no effect. The cardinal symptom is that albumen is present only when the upright position is assumed, and vanishes on lying or sitting down, even when hard work is done by the patient on an exercise apparatus ("postural albuminuria" of A. W. Stirling). In the case reported by the author, however, albumen appeared sometimes when the patient was in bed, at times of great annoyance or stormy weather. *Albumen.*—The quantity is always small. Its chemical composition varies with the individual and in the same individual at different times. Serum albumen, peptone, propeptone, nucleo-albumen, etc., have been found. *Urine.*—The quantity is not much affected. If at any time it is less than normal there is said to be a corresponding increase in the albumen. The specific gravity varies, but is usually normal or higher (1020 to 1030). The acidity is usually *plus*. Teissier gives the following cycle in this disease: (*a*) *plus* excretion of coloring matter, (*b*) albuminuria, (*c*) *plus* excretion of urates, (*d*) *plus* excretion of urea. *Etiology.*—(1) Sex, more common in females. (2) Age, adolescence and early adult life. (3) Heredity, especially in children of gouty and arthritic parents (Teissier). (4) Disputed antecedents are renal affections, colds, overwork, and infective fevers. After reviewing the various theories as to the nature of this complaint, the author states that he considers it to be a special morbid entity, probably depending on perverted function of sympathetic nerves, and having a close analogy to migraine. He does not agree with those who believe the cause to be a "minimal" organic renal lesion, as the almost indefinite time the disease can last without bad effects, and its not being influenced by the quality of the food, are against that theory. Casts are not generally present, but Marie does not consider the presence of casts in small numbers to indicate organic disease, for Hwass, by means of centrifugalization, found them sixty-nine times in seventy-four healthy soldiers. Of these, forty-eight alone had albuminuria, and that of a transitory character.—*Brit. Med. Jour.*, *June 6, '96.*

PRECAUTIONS FOR CONSUMPTIVE PATIENTS.

The following precautions should be taken by patients with a tendency to consumption (adopted by the Bournemouth Medical Society):

The expectoration must be destroyed, and must not be allowed to get dry, as it may then become pulverized and diffused through the air. If inhaled, it may thus communicate the disease to other persons, or cause fresh attacks in the same invalid. On no account, therefore, must pocket handkerchiefs be used for expectoration. If used for wiping the mouth they should be put aside after use. A spitting-cup (or pocket spitting-flask for-out-of doors), containing a little disinfectant solution, should always be used. Small pieces of linen or calico, or Japanese paper handkerchiefs, should also be carried, which should be used only in case of absolute necessity, and burnt as soon as possible afterwards.

Spoons, forks, cups, and other articles of this kind should be thoroughly washed before being used by other persons.

The patient should always occupy a separate bed, and if a nurse is not required, a separate bedroom.

Fresh air and sunlight are most essential. The windows both of living rooms and bedrooms should be kept open as much as possible, although direct draughts should be carefully avoided. The chimney should never be blocked up.

With these precautions no danger of infection need be feared.

The following recommendations as to the cleansing of rooms occupied by consumptive patients were adopted by the Bournemouth Medical Society:

It is an established fact that consumption is sometimes caused by the breathing of matter coughed up by consumptive persons, which, when it becomes dry, may be blown about in the air as dust.

It is desirable, therefore, that rooms which have been constantly occupied by consumptive persons should be very thoroughly cleansed when vacated, so that a declaration or assurance to this effect may be given, if required, to the next occupants of such rooms.

The process of cleansing should include the thorough brushing and exposure in the open air of stuffed furniture; carpets, curtains, hangings, and bedding should be "cleaned," or thoroughly shaken and exposed in the open air for several hours, during sunshine if possible. Where facilities for this do not exist, these articles should be sent to the steam disinfector. Floors, paint, and furniture should be treated with some disinfectant, and then washed with soap and water. Walls should be rubbed down with new bread. Ceilings should be thoroughly dusted, and every conceivable nook for dust should be carefully cleaned. The room should be freely ventilated for at least twenty-four hours with wide open windows.

Rooms which are occasionally occupied by consumptives should be freely ventilated every day, and kept thoroughly clean; they should be thoroughly cleansed, as above described, at least twice a year.

The corporation have adequate arrangements for disinfections, etc. The regulations and tariff can be obtained at the office of the sanitary inspector.—*Sanitary Journal.*

MEDICAL ITEMS.

GOLOWKOW announces in *Wratsch*, No. 7, that he has demonstrated beyond a doubt that the cholera vibrio can penetrate the shell and enter hens' eggs.

GEORGIA barbecues are no doubt very enjoyable by the Hoi polloi of the Association, but the reaction therefrom is unfavorable to business.—*St. Louis Clinique.*

THE working men of Birmingham, England, have endowed the hospitals of that city with a sum amounting to nearly two million dollars. In this good work they stand alone, no other city's working population having done so.

Mr. F. Haas, pharmacy Fifth avenue and Thirty-ninth street, and Fourth avenue and Twenty-first street, New York, has the distributing depot for S. H. Kennedy's Oak Extracts (Quercus alba). Mr. Haas is personally known to the business manager of this JOURNAL.

A LIVERPOOL physician makes a portable spirit lamp out of a thermometer case, by simply fitting it with a few strands of lamp cotton and then filling with spirits. Screw on the top and place a piece of rubber tubing over the joint, making it spirit tight. Good for sterilizing needles. A suitable companion to Pavy's urinary test case and for other purposes.

THE authorities in India have forbidden the use, by the natives, of the water bottle made of skin for transporting drinking-water, and have supplied metal buckets instead. They also require all water to be boiled before being drunk. These precautions are instituted to prevent a return of the virulent epidemic of cholera that prevailed last year.—*Med. News.*

CHANGES IN THE ATLANTA COLLEGES.—Quite a large number of changes have been made in the Faculties of the two Medical Colleges here. As it is difficult to give them in detail, readers are referred to advertising pages xxii. and xxiii. for information as to vacancies filled, positions changed and additions made in the faculty lists and corps of assistants.

M. ROULIN, relying upon clinical experience and struck by the dangers of Roux's serum, proposes to reserve its use for those cases in which the lesions are not accessible. Otherwise he prefers to treat patients by local douches of water charged with carbolate of soda which he has long used with much success. (Translated from *La Médecine Moderne*, May 23, 1896.)

CAPPELNI (*Norsk Magazine for Lægevidenskaben and British Medical Journal*, May 23, 1896) reports a man struck by a knife which wounded a large branch of the coronary arteries and made a cut two inches long in the left ventricle after passing through the pleura without touching the lung. The ventricle was stitched, and the man lived for two and a half days. The necropsy showed pericarditis and various bacteria in the fibrinous exudation.

We have been requested to announce that Professor Dr. Don Francisco Bastillos, Calle de Tacuba, No. 7, Ciudad de Mexico D. F. Republica Mexicana, has been elected Treasurer of the Second Pan-American Medical Congress, to be held in the city of Mexico, beginning the 16th of November. All members residing in the United States and Canada, and others, who contemplate attending, should forward the registration fee, $5.00, gold, to him at once, and notify Dr. C. A. L. Reed, Cincinnati.

Do not use the old-fashioned curved bistoury in opening the simplest abscess. It is unsurgical because you proceed from within outward—from the unknown to the known. This is a false principle in philosophy, in surgery, in everything. Cut from the surface inward and you can deal with difficulties in the order in which they occur. Always work with the aid of sight, and do not pin your faith on anatomy.—*Internat. Jour. Surg.*

"I DARE any political economist to show me one expedient whereby conception may be avoided. I challenge him to name a single preventive which will not do damage either to good health or good morals. Even natural sterility is a curse. Show me a home without children, and ten to one you show me an abode dreary in its loneliness, disturbed by jealousy and estrangement, distasteful from wayward caprice or from unlovable eccentricity." —*Dr. Wm. Goodell.*

THE death, at the age of sixty-eight, of Sir J. Russell Reynolds, M.D., F.R.C.P., took place in London on May 29th. He was one of the best known of English physicians, and had held many positions of honor and importance. He was best known in this country as the editor of his "System of Medicine," but his chief work was as a neurologist. He wrote among other things "Diagnosis of Diseases of the Brain, Spinal Cord and Nerves," "Tables for Diagnosis of Diseases of the Brain." An essay on "Vertigo," and "Scientific Value of Legal Tests of Insanity."

DR. J. G. CLARK reports (*Maryland Medical Journal*, May 30, 1896) that for the last two years very beneficial effects in diminishing the thirst, so common and so trying to patients after abdominal operations, have been obtained by injecting one litre of normal salt solution into the rectum before the cessation of anesthesia. The patient is elevated to the medium high Trendelenburg posture, a stiff rectal tube is inserted well up into the sigmoid flexure and the fluid slowly poured into the glass funnel, which is held three or four feet above the level of the patient's buttocks.

THE death of Germain Sée, already announced, removes a well-known figure from Parisian medical life and an earnest and successful worker from among the older body of investigators. He was born at Ribeauville, on the Rhine, in 1818, of a Jewish family. Besides his numerous contributions on the subjects of the blood, nerves, asthma, the heart, rheumatism, the lungs, stomach, etc., he is well known in Paris as the man who did most there for the introduction to general use of such drugs as salicylate of soda, antipyrin, sparteine, creosote, iodide of potassium, etc., etc.

THE following contains the gist of a paper in the June volume of the *New Orleans Medical and Surgical Journal* by Dr. Just Touatre: "*If it be true* that the sulphate of quinine is all-powerful in acute paludism, that mercury and iodide of potassium succeed in checking the secondary and the tertiary accidents of syphilis, that the salicylate of sodium is the specific remedy for acute rheumatism, and colchicum seed that for acute gout, etc., *then it is also true* that oxygen is the most efficacious remedy in diseases of the blood. . . . *These inhalations of oxygen increase and revivify the red corpuscles, multiply the leucocytes, oxidize the toxins, augment their solubility*, and, therefore, *facilitate their elimination.*"

NONE of the female sexual organs are usually thought to suffer from medical neglect, but Dr. Buford (*Memphis Medical Monthly*, June) read a paper recently before the Memphis Medical Society in which he reminded his audience that the clitoris is a frequent focus of disease. Through irritation due to adhesion between the clitoris and the surrounding mucous membrane various reflex ailments are set up, as well as the tendency to local disturbances which often result in evil habits. Buford directs attention to the advisability of strict cleanliness and of the more frequent examination of this organ.

Lack of sexual feeling in the female has been cured by another physician in several instances by freeing the clitoris from pathlogical adhesions.

Le Progrès Médical (May 13, 1896), contains a report of a paper read on May 4th by Dr. Lucien Howe, of Buffalo, N. Y., before the French Ophthalmological Society upon the laws of the United States concerning the treatment of ophthalmia neonatorum. Dr. Howe was last year elected President of the Ophthalmological Section of the American Medical Association, but was unable to be present in Atlanta. Drs. Terson, Garecki, Abadie, Galezowski, Cleibret, and Parinaud took part in the discussion which followed the reading of the paper. Opinion was divided concerning the results of such laws in France, but the speakers generally advised the training of nurses and midwives in order that they might recognize the seriousness of these cases and treat them till they could be carried to the specialist.

WE are requested by Dr. Sternberg, Surgeon-General U. S. Army, to announce that there are at present three vacancies in the Medical Corps of the U. S. Army, and it is expected that at least three more will occur during the present year. As usual an Army Medical Board will meet in Washington early in October for the examination of candidates. Permission to appear before the board is obtained by letter to the Secretary of War, which must be in the handwriting of the applicant, giving the date and place of his birth and the place and State of which he is a permanent resident, and inclosing certificates, based on personal acquaintance, from at least two reputable persons as to his citizenship, character, and habits. For further requirements of admission, address the Secretary of War, Washington.

BOOK REVIEWS.

A MANUAL OF ANATOMY. By Irving S. Haynes, M.D., Adjunct and Demonstrator of Anatomy in the Medical Department of the University of the City of New York; Member of the American Association of Anatomists, etc. One hundred and thirty-four half-tone illustrations and forty-two diagrams. Published by W. B. Saunders, 925 Walnut street, Philadelphia. Price, $2.50.

Systematic and exhaustive treatises on human anatomy are by no means wanting, and of compends there is certainly an abundance; but how to strike the happy medium between these two and produce a practical working manual for the student at the dissecting-table seems to be a difficult matter. In this book Dr. Haynes has succeeded about as well as others who have written for the same purpose. Dr. Haynes seems to appreciate the student's needs, and has written for the student. He has eliminated from his descriptions a great deal of unnecessary matter, and has included very little that is not important and essential. The regional method of description which he wisely follows is the only rational method of presenting the subject for dissecting purposes. The half-tone illustrations are from photographs of actual dissections, and they therefore give the student pictures the like of which he may hope to reproduce for himself in his own dissections. Some of these illustrations, however, are made too small to be of much service: *e. g.*, figure 83, figure 102, figure 111, figure 123, figure 67, and figures 129 and 130. But the illustrations, as a rule, are good, much better than the highly colored pictures in some of the books, which are evolved out of the imaginations of artists. The anatomy of the brain occupies more than its proper proportion of space, one hundred pages being devoted to it. Ligaments are omitted altogether, an error which the author should certainly correct in the next edition.

Upon the whole the work is to be commended. The author thoroughly knows his subject, and his book will help to efficiently supply the wants of the dissecting-room.

AN AMERICAN TEXT-BOOK of SURGERY. For Practitioners and Students. Edited by William W. Keen, M.D., LL.D., and J. William White, M.D., Ph.D. Second edition, carefully revised. Philadelphia. W. B. Saunders, 925 Walnut St., Philadelphia.

The popularity of the "American Text-Book of Surgery" is evinced by the early exhaustion of the first edition, and its adoption as a text-book by many of the medical schools of the country. The second edition has been thoroughly revised, and many new additions have been made to the text; new illustrations have been added, and some of the chapters have been entirely rewritten, bringing the book well up to date. This is especially true of the sections dealing with fractures, dislocations, appendicitis, radical cure of hernia, and amputations of the breast. The work as a whole is a most excellent one, and abundantly merits its almost universal popularity. Among the contributors are Drs. Frederic S. Dennis, Roswell Park, L. S. Pitcher, Nicholas Senn, J. Collins Warren, L. A. Stinson, P. S. Connor, and the Editors. F. W. M.

THE THREE ETHICAL CODES. That of the American Medical Association; its Constitution, By-Laws, Amendments, etc. That of the American Institute of Homœopathy and that of the National Eclectic Medical Society. Limp cloth, round corners, 55 pages, postpaid 50 cents. The Illustrated Medical Journal Company, Publishers, Detroit, Mich.

By comparing the Code of the Homœopathic Society with that of the American Medical Association, it will be found that several sections of the former are similar to parts of the latter's code. The Eclectic Code is worthy of mention for its brevity.

It will repay every physician to get this little book and inform himself on the articles of faith of these three so-called schools of medicine.

READERS desiring to have special reprints of the Jenner Centenary Number or of G. Kirtland's colored illustrations of cowpox and inoculated small-pox separately, are requested to make early application to the general secretary, as it will be impossible to keep the type standing or to preserve the lithographic plates much longer.—*Brit. Med. Jour., June 6.*

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ORIGINAL COMMUNICATIONS.

"SKIN DISEASE OR 'BLOOD' DISEASE?"

BY M. B. HUTCHINS, M.D., ATLANTA, GA.,
Clinical Lecturer on Skin Diseases and Syphilis, Atlanta Medical College.

A hard-headed old citizen who was once on the losing side in a political race, said "Nine-tenths of the people are fools." This was a harsh judgment, almost equal to David's "All men are liars"; and perhaps also hasty. However that may be, the question at the head of this article grates upon one who has studied all which is involved in its answer. If the patient meant to ask whether he had syphilis, or some other trouble with his skin, it would be easier to answer, and the questioner would stand in less danger of being placed in the "nine-tenths" class. The whole truth is, that he does not know what he means. One has an idea that there is a lot of offensive poison floating in his blood, and that his skin lesion, or lesions, is the poison worked out on the surface. Pustular diseases therefore indicate pyemia, a cancer—cancers swimming in the blood; the eruption of poison ivy lives in his blood for seven years, coming out in summer, hibernating the rest of the time; it never being possible to catch the disease every year. The comparison might be carried further *ad absurdum*, but it is better to inquire for the origin of the question and its meaning.

Undoubtedly physicians have told, and do yet tell, their patients that their skin disease is a manifestation of blood disorder, is "in the blood." The physician who does not know any better is excusable; the physician who doesn't know much better, and uses the phrase to becloud the patient's mind, is probably not much to be blamed—if he is hard up. But the physician who knows better, is not hard up, but just simply knows enough to know it is not "in the blood," without being able to diagnose the condition, yet holds to the patient, is not a friend to the dermatologist, and perhaps would be the first to blame him for taking a case in general practice.

Another, and more widely reaching cause of the ignorance so ludicrously displayed regarding this and many medical subjects lies in the advertisements and literature of patent medicines. Intelligent people who study and reason out religious, ethical, legal, or political subjects, swallow whole, without mental mastication, these advertisements. Poisoning naturally follows from indigestion and mal-assimilation of the matter taken in.

A more reasonable class than the first mentioned is composed of those who mean to ask if the disease is constitutional or local. The patient who says there is nothing the matter with him but his skin eruption receives my profound respect. If there is any defect in his health we find it out and treat it. I once told a lady, whose mother had eczema, that the only blood disease of which I knew was one people were ashamed of.

It is a wearisome task, like looking for a needle in a haystack, to go through a volume on skin diseases searching for "blood" or constitutional diseases. When you have counted them all you may possibly have used the fingers of one hand. What is a blood disease? Is it a disease of the blood, or a disease in the blood? Certain elements may be in the blood, which the secretions have failed to eliminate. Do they appear upon the skin always in the form of a certain well-defined lesion or eruption? Diseases of the blood must be diseases in which the blood's normal constituents are affected or altered.

Now, to bring the matter down to a more logical basis, are skin diseases constitutional or local? Also ask the same question as to the diseases which have been grouped to form the other specialties, and those treated by the general practitioner. Take eczema, the most common of the diseases of the skin, and let us see what we can find to justify any belief that it is a manifestation of blood disorder, or that it is a constitutional disease. The inquiry is most easily answered by the works on dermatology and the note-books of those who treat skin diseases. Eczema does not occur as a symptom of any general disease, neither does it occur vicariously for such disease. There are conditions of the general economy which may act as predisposing factors, and which may retard the cure of the disease, but is this not equally true of any other disease? Certain people, being exposed to a certain group of causes (to the physician perhaps unknown), develop an eczema, other people with apparently the same general conditions develop an acne, others one of the erythemata, rosacea, acne rosacea, perhaps boils or carbuncles—the cocci of pus finding a fit soil in the skin of lowered vitality—etc. There are many general as well as local diseases which affect only those especially susceptible. Every man does not get tuberculosis, at first a local disease; nor kidney disease, nor cataract, nor atrophic rhinitis, nor enlarged prostate, nor cancer, and so on *ad infinitum.* Specific germs have been found to be responsible for a number of diseases, as tuberculosis, leprosy, the pus diseases, typhoid fever, malaria, etc. Insomuch has the "blood" theory been attenuated.

There is no known germ of eczema, of "nasal catarrh," of bronchitis, of gastro-enteritis. The tubercle bacillus causes lesions of the larynx, bronchi, lung, intestine, lymphatic glands, joints, bones, testicles, skin, etc. The typhoid bacillus occurs in the lesions of typhoid fever, the lepra bacillus in leprous lesions, the anthrax bacillus in malignant pustule, pus organisms in purulent conditions, and so on.

Is a subacute laryngitis or a proctitis a "blood" disease? Will "sarsaparilla" cure them? Is chronic endometritis a "blood" disease or constitutional?

The simple truth of the matter is that we have certain germs known as the cause of certain general, internal, external, or local diseases, and that we yet have many diseases in the domain of medicine the cause of which is not known. It is absurd to say a skin disease is an evidence of "blood" or constitutional dyscrasia, then to say that such and such a disease in some other specialty or in general practice is local, *sui generis* or idiopathic. We have many skin diseases which need nothing but local treatment; we have many in the other specialties requiring only local treatment.

On the other hand, we have many diseases—cutaneous, ocular, arthritic, uterine, orthopedic—which yield the more readily to local treatment if all deviations from good health are corrected. Further, if a diagnosis is necessary in other diseases, why is it not in skin diseases? If proper local treatment is necessary in diseases of the rectum or ear, why not in diseases of the skin? The encouragement of the common belief that skin diseases are "blood" diseases, and need only internal treatment, is a weak yielding of moral courage to the exigencies of practice, and a refuge for ignorance.

Dermatologists are not purely localists, but are more expert in the treatment locally of skin troubles. The small matter of diagnosis again comes to the front here, for upon diagnosis depends prognosis and treatment; and the fewer cases of any kind which the physician must treat "on general principles," the better for his fame.

A word as to the other parties responsible for this "blood" idea. The majority of patients who go to a skin specialist have taken "blood" medicines, and have used the "*-curas*" and "*-ines*" in much greater quantity than they would have for any physician; yet they finally get to the dermatologist, as the blood seems not to have been purged of the *materies morbi.*

Syphilis is a constitutional disease—the most perfect in the list of "ills that flesh is heir to." It is met by every general practitioner and every specialist. They use the same drugs, each case requiring its special physician only according to the location of the disease; yet the most certain evidences of the disease are the skin symptoms, and these are always sought. Syphilis, then, is the nearest approach to a blood disease. If the man has not syphilis it is doing him a great wrong to say that he has it, or something so close akin to it as to be "in the blood."

Excepting the many skin diseases labeled neurotic simply as a cloak for ignorance, we still have far more of them attributable primarily to a neurotic cause than are traceable to the "blood." But does this qualify the neurologist to treat them? By no means. He would not know which ones were neurotic unless they were such as typified the nerve or brain disease. At the same time we find at one time a skin disease in a neurotic patient, again the same disease in a dyspeptic, again the same in a teething baby, again in a varicose leg, a whiskey drinker, a genito-urinary patient, or, finally, and as often as in all the others combined, in a patient otherwise perfectly well. Given, one hundred patients with, and one hundred patients without, skin diseases, and the one hundred *without* will show just as great deviation from normal health as the one hundred *with* the skin diseases. This is proven by my own notes of cases, and can be verified any day by any physician.

There are many skin diseases which are less trouble to keep than to treat, but the large majority are either disfiguring, uncomfortable, distressing, or dangerous. The latter cases belong as naturally to the dermatologist as an iritis to the oculist, an engorged uterus to the gynecologist, or an appendicitis to the surgeon.

Other specialists have traveled the same route and have gained, or are gaining, recognition. Of dermatology it might be said it is recognized as yet only in certain localities; but just as sure as the skin is one of the most extensive, most important, and most accessible parts of the body, is it that dermatology has not long to wait for recognition as a clear-cut, necessary, and useful specialty.

Pioneers have fought their way, step by step, though confronted by many hardship, until they or their successors have finished the work and left easy progress for others. So is it in dermatology: pioneers have opened the way in many localities, and are opening it in others, with no intention of abandoning the struggle until the recognition they demand is obtained.

THE TREATMENT OF HAND INJURIES.*

By WILLIAM PERRIN NICOLSON, M.D., ATLANTA, GA.,
Professor of Anatomy and Clinical Surgery,
Southern Medical College, Atlanta.

In the entire field of surgery there is no class of injuries that more seriously affects the future prospects of the individual than those of the hand, and the subsequent effect upon his capacity for taking care of himself lies largely at the door of the surgeon to whom the treatment is confided. In almost any line of life the earning capacity is impaired by a loss of even a portion of the hand; but, in a large majority of persons, this loss is in direct proportion to the amount of destruction of the member. Hence it becomes the duty of the surgeon not to consider the cosmetic effect, but to strive to leave the earning capacity as little impaired as possible; always remembering that even a small portion, lost or saved, means much in either direction to the patient.

In surgical literature I am sure the special character of the surgery of the hand has not received the attention that the subject deserves, viewed both from its important bearing upon the individual, and the very wide prevalence of such injuries. The teaching of many years ago prevails in many instances. The application of the principles of antiseptic surgery to this class of injuries has enormously increased the field for conservative surgery, and has actually rendered, in my opinion, destructive surgery uncalled for and unjustifiable.

In defining my view of "destructive surgery," as here applied, I would say that when a surgeon goes to any extent beyond the immediate lesion in removing crushed portions of the hand, or in removing any part that is not unequivocally destroyed, he is guilty of destructive surgery. The doctrine formulated by Vernueill some years ago "never to cut away from the hand any tissue that is not pulpified, or destroyed beyond all hope of recovery," has been, in my very large experience, tried hundreds of times, and never found wanting. My faith in the recuperative power of the hand is absolute, when nature is given the opportunity, under suitable surroundings, of reestablishing the injured parts. The well known fact of the enormous blood and nerve supply, and the free communication of the vessels on all sides, has given the hand the power to handle and dispose of offending germs more capably than almost any part of the body; and, at the same time, the excessive amount of fibrous tissue and serous membranes has given to the inflammation, when once begun, the power to extend with alarming rapidity, and to leave excessive stiffening when it has passed away. This great recuperative power, under the proper guidance of the surgeon, will restore parts apparently in a hopeless state of destruction, and will bring forth a useful member from apparent chaos.

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*Read by request before the Atlanta Society of Medicine, April 17, 1896.

From a large observation I do not believe it lies in the power of any man, no matter how experienced, to say what portion of the hand will be restored to life, and what will not, and hence I believe that the decision of the question should be left to the unerring judgment of nature. It may be far more brilliant and beautiful to amputate *secundem artem*, but the patient will poorly appreciate a useless stump, no matter how beautiful. I believe that here we have an instance where the beauty of operating should be ruthlessly sacrificed to the more practical work of conservatism. A physician belonging to the class of a young man who explained to him an unnecessary and improper operation by saying "that he loved surgery too well not to do it," is the most dangerous enemy to the class of patients under observation.

If asked what amount of cutting should be done in a given case, I should say "never use a scalpel in hand injuries." (Vernueill.) Cut away with scissors such tissue as may be hopelessly destroyed, leaving whatever shreds of skin remain to cover stumps, even though skin may slough afterwards. If a finger has been crushed completely off, remove projecting point of bone with bone forceps, covering the end if possible by means of any remaining shreds of skin. The old teaching that surgeon should go far enough beyond the injury to secure a flap of healthy tissue is pernicious, in that it destroys far more of the finger than is necessary. Nature will soon cover such end with granulations, and form skin over it, and should the bone project too much, it can subsequently be removed by a very simple operation. In many instances such a stump may be covered with an organized blood-clot, thus securing an ample bone protection.

Compound fractures should be treated by placing the fragments as nearly in position as possible, and holding them upon splints padded with gauze, or placed in a trough splint and gauze packed around, so as to keep the parts in as good apposition as practical. An excellent substitute for adhesive plaster, and far preferable, is a strip of iodoform gauze, held at each end to the skin by collodion; this will permit the escape of discharges, and admit of applications to the wound, and at the same time secure the parts admirably. I use but few sutures in the hand, and then only at considerable intervals, believing free drainage to be of the utmost importance. Secretions that cannot find ready egress from the wound are backed into tendon grooves, and quickly reach the palm, even ascending the forearm and leaving probably agglutination of the serous surfaces. Irregular gaps are much more safely filled with blood-clots, which can be readily accomplished by the dressings that I shall describe.

The most important requirement in the treatment of such injuries is the securing and maintaining of complete asepsis. It goes without saying that this is a difficult matter, remembering, as we all do, how much painstaking detail is necessary to secure an aseptic condition of the hand of the surgeon. If, in the hands of one whose work naturally presupposes a condition of cosmetic cleanliness, such asepsis is only secured by washings, which, in the language of Dr. Ashhurst, "rivals the washings of the ancient Pharisees," how remote must be the probability of attaining to the same in the hand whose surroundings have been such as to impose upon it conditions which render a vast accumulation of surgical filth necessary and unavoidable. This hand, if prepared for any ordinary aseptic surgical procedure, would require twenty-four hours for perfect cleansing; what must be the prospect then when it is crushed and lacerated, and giving to the unfortunate possessor untold agony? And yet we are told that by using the nail brush with soap and water, soaking the hand in solutions of bichloride of mercury, and by various other devices, we can render such a hand free from germs. Under profound anesthesia this may be possible, but without it I assert that it is not, provided we stop short of brutality. If an aseptic condition is absolutely necessary, and is at the same time so difficult to obtain by the means usually adopted, then if we can secure same by a mode of treatment that is free from danger and absolutely certain in its results, it surely would be a matter of duty to adopt it. These attributes I emphatically claim belong to the continuous saturation of the parts with a harmless antiseptic solution, until beyond the danger from germ invasion.

For the past ten years I have treated practically all hand injuries by the saturation, under rubber tissue, with an antiseptic solution, and to-day my implicit faith in the results is never disappointed. Reasoning would lead to the natural conclusion that any germ life is placed in far greater jeopardy when kept in constant contact with a germicidal solution than when the application has been discontinued, and the remaining spores that may have been left can reproduce and multiply in its absence. Under this treatment I have never seen suppuration occur. Pain is prevented to a large extent by the wet dressings kept warm under the rubber tissue, and circulation is kept from violent reaction. The organization of blood-clot in waste spaces is favored to a high degree; and should any portion, whose life is uncertain, subsequently slough, the separation of the dead portion is hastened, while it is kept aseptic and free from any danger to the patient. The report in the following cases will give an insight into the types represented, and also illustrate the method of dressing which I have followed in these cases:

CASE 1.—*End of thumb entirely severed.*—A. D. A., white, male, ten years of age, while experimenting with a new hatchet, cut off the end of left thumb diagonally through the nail, entirely severing it, and leaving the severed portion in the yard. His mother subsequently searched in the shavings, found the fragment, and replaced it without even washing. When I saw him a short time afterwards the tip was in good position, and adhered, though entirely bloodless. As it had already adhered I did not remove it for the purpose of cleansing the surface, but wrapped around it, along the line of the wound, first a piece of iodoform gauze saturated with camphorated phenol, and over this applied a gauze dressing, covered with rubber tissue. Through an opening in this a solution of listerine in water one to three parts was applied frequently, so as to keep the surface constantly wet. On the fourth day the external dressings were removed, with the exception of the strip which surrounded the line of the wound and was forming a firm support to the part, and similar dressing reapplied. These dressings were continued for one week, when the antiseptic solution was withdrawn, and an ordinary antiseptic dressing applied. The result was that at the end of a few weeks there was perfect union between the parts, not even a line remaining through the nail to show where the separation occurred.

CASE 2.—*End of finger mashed off in a door.*—Mrs. R., while closing folding doors, caught the end of the left index finger, mashing it off just behind the nail, and leaving it attached only by a small strip of tissue. When I saw her, within an hour afterwards, it had already been dressed by another physician, who simply placed around the wound a strip of isinglass plaster. Removing this I found that in placing the parts in apposition there was a rough, ragged gap between the severed portions, which rendered it impossible to bring them in sharp contact. The tip of the finger was placed in as accurate a position as possible, a strip of rubber tissue dipped in camphorated phenol placed along the line of separation; then a strip of iodoform gauze was applied to the skin by collodion on the inside of the finger and passed over the tip to the outer side, where the end was fastened about one inch and a half from the end of the finger. This held the fragment in good position. The gauze dressing was applied under rubber tissue, and the patient instructed to keep the parts thoroughly saturated with listerine solution. Upon the fourth day the removal of the dressings showed the line of separation between the two portions filled evenly by a blood-clot. Wet dressings were continued for about a week, when they gave place to dry antiseptic dressings. The result of this case was the organization of the blood-clot with perfect union of the severed parts and subsequent return of sensation to the tip of the finger.

CASE 3.—*Compound fracture and severe crushing of hand.*—J. C. T., railroad employee, was seen February, 1896, with the following injuries: Right thumb compound fracture, permitting the portion of the first phalanx to be twisted entirely out of position, with the palmar surface turned outward and backward, with a ragged, lacerated wound at the seat of fracture. Beginning at the fissure between the index and middle finger, the hand had been bursted by the force of the blow, forming a lacerated wound about an inch and a half long and extending deeply into the palm. The tips of the middle and ring fingers were both mashed off through the nail. He was seen in the cab of a freight-train, where there was no facility for cleansing the hand. The thumb was twisted into position, wrapped with iodoform gauze, and held so by an aluminum splint, and a gauze dressing applied over the splint. The wound in the palm of the hand was covered by a strip of rubber tissue dipped in camphorated phenol, and approximated by wrapping a strip of gauze around the hand, no sutures being used, the tips of the fingers covered with rubber tissue immediately next the raw surface, a gauze dressing applied, and the entire dressing covered with rubber tissue. This was kept saturated as in the other case for four days with the listerine mixture. Upon changing the dressing the wound in the palm of the hand was found filled with a smooth blood-clot; the tips of the fingers were also covered in the same maner, the thumb appearing in such good shape its dressings were not removed. At the end of ten days wet dressings were withdrawn, and dry antiseptic dressings continued. The thumb remaining in good condition, the original dressing was never removed until the end of the third week, when there was complete healing of the flesh wound, and fairly good consolidation of the bony surfaces, with perfect position of the fragments. At no time during the entire treatment was there any suppuration whatever, though no attempt was made to in any way cleanse the hand before applying the dressing, and the result was perfect recovery, without any stiffening of the hand in any respect.

CASE 4.—*Punctured wound of hand.*—C. B., aged 13, while assisting his father in cleaning his rifle, had the ramrod passed through his hand, entering at the fold of the thumb, passing through to the ulnar border of the hand, where it stopped just under the skin. When seen a short time afterwards there was considerable swelling of the hand, from effusion, and much pain. A wet dressing was applied and kept continually wet for one week, with the result that there was no swelling, no pain, and no evidence whatever of any suppuration, though the instrument which caused this puncture was one that furnished every means for securing this end.

CASE 5.—*Severe laceration of all of the fingers.*—William Singleton, colored laborer, was injured in the summer of 1891 by having his right hand drawn into a corrugated crushing machine of a cotton-seed oil mill. He was seen by me soon after the injury, and it was found upon examination that one corrugation had passed with mathematical accuracy the entire length of the dorsal aspect of each finger, crushing away all of the soft tissues and plowing a furrow in the bone itself. The bottom of each wound showed no trace of either extensor tendon or periosteum. The soft tissues of each finger were compressed into a small strip along the palmar surface, and by using ordinary pressure with the fingers it was found that they could not be replaced so as to meet upon the back of the finger, but left a vacancy of almost half an inch between the edges. It should be said that the entire hand, in fact the entire man, was freely covered with the peculiar colored cotton-seed meal, and perfect cleansing was impossible.

With the assistance of Dr. L. B. Grandy the hand was dressed by the following method: While the tissues were compressed as nearly in apposition as possible, a running catgut suture was passed from side to side so as to hold the edges as nearly in contact as practicable, and leave upon the dorsum of each finger a trough, having for each side bruised tissue, and the bottom bare bone. Over this trough, or groove, was placed a strip of rubber tissue dipped in camphorated phenol; each finger being then separated from the others by several thicknesses of iodoform gauze, and the whole hand enveloped in gauze and bound upon a metallic splint. An outside cover of rubber tissue completed the dressing. An opening was cut into this tissue, and the patient instructed at intervals of several hours to saturate the dressing by pouring through this the following mixture: Carbolic acid one dram, listerine two ounces, water six ounces. Instructions were given that this saturation should be kept up constantly, especially when any pain developed in the wound. These dressings were not changed until the fourth day, and where the groove was upon the back of each finger was found completely filled with moist blood-clot, restoring the contour of the organ and entirely filling up all waste spaces. A similar dressing was applied with antiseptic precautions, and this wetting with antiseptic solutions continued for four days more, at which time the second change of dressings took place. Without going further into the details of the history of the case, I would say that dressings of this character were continued for about two weeks, when it was found that the blood-clot had been entirely replaced by tissue, which was covered with healthy granulations, and these went on to the formation of skin without suppuration. The patient was dismissed from treatment at the end of about six weeks, and since that time has been following his regular occupation in the mill, having good power of flexion and extension, with the hand practically as useful as ever.

The above cases illustrate the principle which I have desired to bring out, showing the influence especially of blood-clot closing up waste spaces in injured hands, and also illustrating the fact that suppuration, even when all conditions seem to favor its occurrence, is prevented by the application of the wet antiseptic dressings. Having advanced in the previous part of this paper the idea of permitting parts that are damaged to slough away under antiseptic precautions, instead of removing them by amputation, I desire to report another case which illustrates the attainment of the desired end of this mode of treatment.

CASE 6.—Mary W., colored, occupied in a steam laundry, while attending a mangle had her hand drawn in between two cylinders heated to a temperature of 350 degrees. It became necessary to send for the engineer and to remove several bolts before her hand could be released, and this occupied about twenty minutes. When I saw her the fingers were flexed, the flesh practically burned away, and what remained was literally cooked and hard, until the hand resembled more a bird's claw. The entire back of the hand was denuded almost to the wrist joint, leaving the metacarpal bones bare. Had an amputation been made at that time it would have been impossible to secure enough flap to cover a wrist-joint stump. I concluded to permit the burned portions to slough away; so the hand was dressed antiseptically with dry dressings, as this was before I began the use of wet dressings in these injuries. After several weeks the line of demarcation was formed, and the fingers were cut away with scissors at the metacarpal phalangeal articulations. The entire back of the hand finally became covered with granulations, skin formed over them, and the only portion of the metacarpus which was lost was the immediate articular ends of the bones of the thumb and index finger. Though the entire process required about two months for a complete cure, this patient recovered with a stump free from sensitiveness, and leaving the entire metacarpus, a fragment of the hand that was of material service to her in earning her living. At no time was there any disturbance from the sloughing which was taking place, and it was kept free from odor by the effects of the antiseptics.

In conclusion, I think it has been demonstrated by these cases, which are selected from a very large number, that the claims which I have made are substantiated by the results. I know of no feature which I more desire to impress than the practical freedom from pain which is attained by this method of dressing, knowing how exceedingly painful any wound of the hand is in almost any form of dry dressing.

As to the antiseptics employed I do not know that there is any especial choice, except that where the application to the wound is to be constantly made I believe that those free from toxic effects should be employed. I have used largely in my work listerine, because at the time I began this work it was about the only representative of this class of antiseptics, and it presents an agreeable odor which is not distasteful to the patient or those about him. Since that time I have used a number of other preparations with practically the same result. Where I desire to add an anesthetic effect I have been in the habit also of combining carbolic acid with the mixture.

The preparation spoken of as "camphorated phenol" is prepared by mixing equal parts by weight of gum camphor and liquefied carbolic acid crystals, or by placing the two bodies together as solids. The resulting product is an oily liquid, of the combined odors of the two constituents, but having properties entirely different. This can be poured into fresh wounds without pain and without any cauterizing effect, not even coagulating blood. It is a powerful antiseptic and deodorizer, and has decided anesthetic value. I have injected as much as fifteen minims into my own forearm without any marked reaction following. In many conditions I regard this as an invaluable preparation.

In defense of the somewhat radical views that I have advanced I beg to say I believe that a trial of this method will bear out the claims made for it in every detail.

ONE HUNDRED AND SIXTY-SIX CASES OF CANCER OF THE PREGNANT UTERUS OCCURRING SINCE 1886.*

BY GEORGE H. NOBLE, M.D.,
ATLANTA, GA.

(*Concluded from last number.*)

There were three forceps deliveries with previous operations, two by incisions and one curetting. Severe bleeding occurred in the two cases of incisions, one mother dying in twelve hours, and in the other case the child was lost. The remaining case was successful, also an additional one without a previous operation. Estimated results in such a small collection are very uncertain, but, as far as they go, they bear out the claim that the use of the forceps is attended with some danger, chiefly from rupture of the diseased cervix and as a carrier of infection. They also support the claim of Baudelocque† that 75 per cent. of mothers and 50 per cent. of children recover. (See Table XI.)

I have encountered but one instance of amputation of the anterior lip during labor, resulting in the recovery of the mother and death of the child.

At five different times tumors were removed intra-partum by

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* Read before the Southern Surgical and Gynecological Association in November, 1895.

† Taken from Charpentier's "Cyclopedia of Obstetrics and Gynecology," vol. iii., p. 168.

OPERATIONS, INTRA-PARTUM.

TABLE XI.—DELIVERY BY FORCEPS—WITH PREVIOUS OPERATION.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result. mother	Result, child.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
124	Merckel.	Münchener medicinische, Wochenschrift, 1889.	Cervix and roof of vagina.	Incisions.	Recovered.	Dead.	Died in two years.	At term	Carcinoma	Severe hemorrhage.
125	Fischer.	Centralbl. f. Gyn., '85, No. 43 (duplicate Case 38, Wendriner's 61 cases).	Portio vaginalis.	Incisions, bleeding.	Died in 12 hours.	Lived.	....	"	....	Severe bleeding.
126	Schroeder.	Ann. de Gyn. et d'Obst., Paris, 1894, xli., p. 187.	....	Curetting.	Recovered	Lived.	....	"	Carcinoma	Puerperal fever.
127	Loehlein.	Centralbl. f. Gyn., 1891, No. 10.	Post. lip, size of goose egg	Forceps, without previous operation	Recovered.	Recovered.	....	4 weeks before full term.	"	Vaginal hysterectomy during puerperal period; recovered.
	4 operators.	....	....	4 cases.	3 recov'd. 1 died.	3 lived. 1 died.	....	3 at 9 m 1 at 8 m	3 carcino. 1 unknown.	

AMPUTATION ANTERIOR LIP (INTRA-PARTUM).

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother	Result, child.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
128	Skutsch.	Sergelken, Jenna, 1892.	Cervix.	Amputat'n anterior lip by ligatures & tampon.	Recovered.	Mutilated; dead.	....	Full term.	Carcinoma	Subsequent vaginal hysterectomy; recovery.

scissors, curette, forceps, thermocautery, etc., with four immediate recoveries of both mother and child. The case that died was a tumor of the cervix and vagina, which was partially removed; mortality 20 per cent. (See Table XII.)

Incision of the cervix is a subject that is likely to present itself for consideration in a great many cases at or near the end of gestation. It is therefore one of considerable importance to the child and also to the mother, as it may be the means of evacuating the uterus preparatory to a subsequent extirpation. Seven cases with five immediate recoveries (mortality 28.5 per cent.) are shown in this list. Hemorrhage is the great danger to be feared; the two deaths in the list are chargeable to it, dying respectively in two and twelve hours. Another case was forcibly dilated by the hand, and the uterus ruptured through into the bladder and peritoneal cavity. She lived for three and one-half months, and is therefore on the list of immediate recoveries. Two others died respectively in five weeks and in two years. The final results were death in all the cases fully recorded. Several had protracted confinements, as follows: one was in labor thirty-six hours; one in labor one and one-half days; one in labor six days; one in labor eight days. To this is ascribed in a very large measure the death of three babies. The infantile mortality was 35 per cent. After incisions the babies were delivered as follows: four by turning, with one death; one by extraction, with one death; one by forceps, with one death; two spontaneously, with one death. Of the seven cases, four were dead within three and one-half months after labor. It appears that after the cutting the hemorrhage is so great that there is a demand for immediate delivery or plugging of the womb with the extremities of the child for the purpose of controlling it. (See Table XIII.)

Five induced abortions have been encountered, with a mortality of 20 per cent., the death in this case being due to puerperal fever. One case had a carcinoma the size of a hazelnut, successfully removed on the seventh day of childbed. The woman conceived again, and was delivered three years later at full term. One uterus had a deep rupture of the cervix, to which the curette and cautery were applied, resulting in normal childbed. The ultimate results are unknown, except in the one case which was cured by removal

TABLE XII.—REMOVAL OF TUMORS—INTRA-PARTUM.

No.	Operator.	Bibliography.	Location of tumor.	Means of removal.	Result, mother	Result, child.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
129	Gönuer.	Zeitschrift f. Geburtshilfe und Gyn., vol. x. No. 1.	Cervix and vagina.	Spoon, forceps, and galvano-caustic.	Recovered.	Recovered.	Died ten months after.	....	Carcinoma	
130	Gönuer.	Ibid.	Cervix.	Partial removal before birth; forceps and thermo caustic.	Recovered.	Dead.	Well two years after	....	Carcinoma	
131	Gönuer.	Ibid.	Cervix and vagina.	Removed before delivery by means of cutting forceps.	Died in 3 mos.	Lived.	....	....	Carcinoma	
132	Wiemer.	Breslauer ärztliche Zeitschrift, 1880, 4.	Post. lip and roof of vagina (size goose egg)	At full term by thermo-caustic; labor pains three days after.	Lived.	Lived.	Well in four w'ks	....	Carcinoma cauliflower	
133	Schmitt.	Arztliches Intelligenz Blatt., 1884, p. 533.	Portio and vagina.	Partial removal, scissors and forceps.	Died.	Lived.	....	....	Carcinoma	
	3 operators.	....	....	5 cases.	3 recov. 2 died.	4 lived. 1 died.	3 recover'd 2 unknown.	....	5 carcino.	

TABLE XIII.—INCISIONS OF CERVIX.

No.	Operator.	Bibliography.	Location of cancer.	Incisions.	Result, mother	Result, child.	Recurrence.	Period of gestation.	No. of hours in labor	Diagnosis.	Birth.	Remarks.
134	Brandt.	Berlin, 1881.	Cervix, deep.	2 incisions.	Died in 5 weeks	Dead.	Metastatic formations.	....	3 days.	Carcinoma.	Spontaneous.	Parametritis; pneumonia.
135	Fischer.	Centralblatt f. Gyn., 1883, No. 43.	Portio vaginalis.	Incisions.	Died in 12 hrs. acute anemia	Living.	....	....	......	Carcinoma.	Forc'ps	
136	Striger.	Correspond der schweitzer Aertze, 1888, vol. xviii.	Cervix.	Deep incisions.	Lived.	Twins; lived.	....	....	36 hrs.	....	Turning.	
137	Merckel.	Centralblatt f. Gyn., 1889, No. 44.	Cervix and upper vagina.	Incisions.	Lived 2 years	Dead.	....	....	1½ da's	....	Spontaneous.	Tampon.
138	....	Zeitschr. f. Geburtshilfe und Gyn., 1889, vol. xviii.	Cervix, polypus, lower part of cervix gone.	Incisions.	Lived 8¾ mos	Dead.	....	....	......	Carcinoma.	Turning.	Dilation by hand; os rigid; perforation; skull bones removed; large anterior rupture of cervix, bladder into abdominal cavity; anteflexion and compress. Foul-smelling discharge; abscesses.
139	Bousquet.	Centralblatt f. Gyn., 1890, No. 4.	Cervix.	Incisions.	Died in 2 hrs.	Dead.	....	....	6 days.	....	Extraction.	Rupture of lower section of uterus; hemorrhage profuse.
140	Laguel.	Bar Thèsis de Paris, p 195.	Cervix.	Incisions.	Peritonitis; recov.	Dead.	....	6½ mos	....	....	Turning.	
	7 operators	....	....	7 cases.	5 recov 2 died.	3 recov 5 died.	....	....	....	3 carci. 4 unkn.		

of the tumor and was well at the end of three years. As abortion destroys the child and does not materially benefit the mother, it becomes a question of doubtful utility, especially in cases that are amenable to other methods of treatment. (See Table XIV.)

Lewis,* of New Orleans, states that about 40 per cent. of all cases abort spontaneously.

Gusserow on Cohnstein says it is about 35 per cent., only 32 per cent. of the children being born alive, and hardly 20 per cent. lived until their mothers left the bed. "Here we have 20 per cent. of living children, and one-half of them without mothers."

The expectant plan of treatment presents a very good showing —that is, twenty-one cases with nineteen recoveries, two deaths, making a mortality of 10.5 per cent., including five cases under seven months of gestation, or 14.2 per cent. by excluding the five latter cases. Of the twenty-one cases the disease was confined to the cervix or a portion of the same, only two of which were extensive, leaving fifteen cases limited in extent; three of the remaining had invaded the neighboring tissues, and one was not stated. Thus the comparatively low mortality is explained, for a like number of cases would have shown a much more woful set of figures.

Charpentier† states that in forty-seven cases twelve died of rupture of the uterus and three of laceration of the cervix, or 31.9 per cent. Chantreuil places the maternal mortality at 36.7 per cent., and the writer at 24.3 per cent, the average of which is 30.4 per cent, childbed mortality.

After confinement 35 per cent died within three months of cancer, 28.5 per cent. of others had recurrences, while the remainder were not observed; thus 64.4 per cent. were either dead or in a helpless condition soon after childbed.

Of the sixteen recoveries among the cases advanced to seven months of gestation, nine succumbed to the disease, one died of an operation, and six are not reported; thus no final cures are to be found in the list of those treated by the expectant plan. (See Table XV.)

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*Charpentier's "Cyclopedia of Obstetrics and Gynecology," vol. iii., p. 166.

†Charpentier's "Encyclopedia of Obstetrics and Gynecology," vol. iii., p. 167.

TABLE XIV.—MISCARRIAGE, ARTIFICIAL OR INDUCED.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, fœtus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
141	Gönuer.	Zeitschrift f. Geburtsh. und Gyn., vol. x., No. 1.	Cervix.	....	Recovered.	. .. ...	Conceived and delivered again 3 years later; full term.	4½ mos	Carcinoma	Removed carcinoma, size of hazelnut, seventh day of childbed.
142	Clauss.	Tübingen, 1890.	Vagina and uterus.	....	Recovered.	....	....	6 mos.	.. ..	Birth spontaneous seventh day; deep rupture of cervix; childbed normal; curette and cautery.
143	Clauss.	Ibid.	Cervix.	....	Recovered.	Living fœtus.	....	5 mos.	....	Childbed normal.
144	Floel.	Centralblatt f. Gyn, '91, duplicate 32, Wendriuer's 61 cases.	Cervix (incipient).	Perforation of dead child on account of exhaustion.	Recovered.	Dead.	....	....	....	Vaginal hysterectomy in puerperal period.
145	Heilbrunn.	Inaugural Dissertation, Würzburg, 1881.	Cervix and Vagina	Perforation of dead child.	Died in 4 weeks of puerperal fever.	Dead.	....	....	....	Fever.
	4 operators.	....	5 cases.	....	4 recovered 1 died.	2 dead. 1 lived. 2 unkn	....	....	1 carcino. 4 unknown.	

EXPECTANT PLAN OF TREATMENT.

TABLE XV.—SPONTANEOUS EVACUATION OF UTERUS.

No.	Attendant.	Bibliography.	Location of cancer.	Accidents or complications.	Result, mother	Result, child.	Recurrence.	Period of gestation.	Diagnosis.	Time in labor.	Remarks.
146	....	Correspond. du Schweizer Aerzte, 1890, vol. xx.	Post. lip & right side.	Deep rupture of cervix.	Recovered.	....	In 1 mo	.....	Carcinoma	2½ dys.	Spontaneous birth; cure'te and cautery; childbed fever.
147	Schroeder.	Zeitschrift f. Gebertshilfe und Gyn, 1892, vol. xxiii.	Pelvic connective tissue.	....	"	....	Died in 3 mos.	8 mos.	"	....	Recurrent cancer; ant. lip amputated 4 years before.
148	....	Ibid.	Portio vaginalis.	....	"	....	None.	......	"	....	Died of peritonitis from subsequent vaginal hysterectomy.
149	Salzmann.	Königsberg, 1890.	Cervix and neighbori'g tissue posteriorly.	....	"	Dead (mutilated).	Not observed.	....	"	4 days.	
150	Brandt.	Berlin, 1881.	Cervix.	Cervix ruptured in six parts by traction on foot.	"	Lived.	None.	....	"	......	
151	Bileted.	Centralblatt f. Gyn., 1884, No. 8.	Cervix.	....	"	....	Much worse 2 ms lat'r	......	"	....	Futile attempt to use forceps; turning.
152	Floel.	Coburg, Centralblatt f. Gyn, 1896, No. 32.	Cervix.	Placenta previa.	"	......	....	....	"	....	Escape of waters five days without labor pains; turning futile; perforation; subsequent amputation and hysterectomy.
153	Döhlein.	Deut. med. Wochenschrift.	Cervix.	Fever.	"	....	None.	....	"	....	Subsequent vaginal hysterectomy eighteen days.
154	Sergelken.	Jena, 1893.	Cervix.	....	"	....	Died in 18 mos.	......	"	......	Subsequent vaginal hysterectomy; recovery.
155	Heinricius.	Frommel's Jahresbericht, 1888, p. 126.	Anterior lip (extensive)	....	"	....	Died in 18 mos.	....	"	....	Amputation portio vaginalis, 2½ months later.
156	Perschin.	Ibid, 1890.	Anterior lip	....	"	......	In post. lip.	....	"	....	Amputation anterior lip; recurrence on posterior lip; vaginal hysterectomy; recovery.

157	**Stratz.**	Zeitschrift f. Geburtsh. u. Gyn., vol. ix., No. 11.	Cervix.	....	Recovered.	Lived.	Died in 2 mos.	....	Carcinoma	....	Supra-vaginal amputation of portio vaginalis.
158	**Hooper, J. W. D.**	Australian Med. Journ., 1889, N. S. xi., 417-426.	Cervix.	....	Died next dy	Died.	None.	....	"	....	
159	**Stephens, L. P.**	Atlanta, Ga. Seen by the writer.	Cervix.	Deep rupture of cervix.	Died.	Died.	None.	....	"	....	Husband positively forbade any interference.
160	**Schroeder.**	Ann. de Gyn. et d'Obst., Paris, 1894, xli., p. 187.	Cervix.	....	Recovered.	Died (macerated).	Died in 1 mo.	....	"	....	Version and extraction.
161	**Coe.**	Amer. Journ. Obst., N. Y., 1893, xxvii., 515.	Cervix.	....	"	Lived.	Recurrence.	....	Papilloma.	....	Vaginal hysterectomy; recovered.
162	**Clauss.**	Tübingen, 1890.	Cervix destroyed.	Sev're hemorrhages.	"	Living fœtus.	.... ..	5 mos.	....	29½ hrs	
163	**Felsenreich.**	Weiner medicin. Presse, 1883, p. 34.	Portio vag. size small apple.	....	"	....	None in 3 years.	4 mos.	Carcinoma (cauliflowr)	....	Amputation, fifth week afterward, of portio vaginalis.
164	**Schroeder.**	Ann. de Gyn. et d'Obst., Paris, 1894, xli., p. 187.	Cervix.	....	"	....	....	4 mos.	"	....	Curette and cautery.
165	**Mackenrodt.**	Ibid., 1894, pp. 81 97-187-202.	....	....	Died in 3 mos.	Died some days later.	Metastatic.	7 mos.	"	....	
166	**Mackenrodt.**	Ibid. (Hernandez, E.)	Cervix (extensive.	....	Died in 2 mos.	Died.	Died in 2 mos.	6 mos.	"	....	
	18 reporters.	....	....	**21 cases.**	19 rec. 2 died.	5 rec. 5deaths 11 unkn	....	....	16 carcinomas. 1 papilloma. 4 unknown.		

The very good showing has changed into a very poor one.

Chantreuil places the infantile mortality at 60 per cent., Cohnstein at 57 per cent., Hermann at 40 per cent., the writer at 50 per cent., making an aggreate mortality of 51.8 per cent.

Cohnstein (Bar thesis) states that 68 per cent. go to full term, and Hermann puts it at 28.3 per cent., which gives an average of 48.1 per cent. Then if only 48.1 per cent. of pregnancies go on to full term and 51.8 per cent. of these die, the estimate of successful issue is 24.8 per cent. of all the pregnancies in the cancerous uterus.

The best way to arrive at a conclusion as to the most satisfactory method of conducting a case of this sort is first to exclude all the operative measures that have resulted in high death-rate and accomplish but little good. Artificial abortion secures to the mother very little reduction in the childbed mortality, and defers death only for a limited time. When it is done with a view to subsequent extirpation the advantages gained in the reduction of the size of the womb are counterbalanced by loss of valuable time and puerperal fever; and as the uterus can be extirpated as safely during pregnancy as at other times, artificial abortion is worse than useless. So also should amputations and partial amputations of the cervix be discarded if any hope for the mother remains. It is true that a few cases have been cured by this means, but the number is so small that it will not pay for the chance it has thrown away for saving the mother's life. In like manner all "dilly-dally" methods, such as curetting and cutting off the exuberant growths, should be eschewed as dangerous despoilers of time and opportunity. The next consideration is whether we should act in the interest of the mother or the child, or both. In the incipiency of the disease, when the mother's chances are good, give her the benefit of it. Late in the disease, when the mother's case is hopeless, look to the interest of the child. Between these will be found cases of doubt in which there will be found room for the exercise of judgment. Careful perusal of the statistics will show that vaginal hysterectomy is the most satisfactory means of securing permanent relief in the early period of gestation. Next to it is abdominal hysterectomy in suitable cases. The former gives an immediate mortality of 4 per cent.

and an ultimate recovery of 33.3 per cent. at the end of two years, but the conceptions are all destroyed. So we have here a comparison, upon the one hand, of 33.3 per cent. of ultimate recoveries of the mothers under vaginal hysterectomy, and, upon the other hand, 20 per cent. of ultimate recoveries of the children under the expectant treatment, which proves the former decidedly preferable.

At the close of gestation, when the mother's case is hopeless, she should be delivered by such means as will best serve the child's interest, though her immediate safety and comfort should not be disregarded. In instances of partial obstruction of the cervix incision may answer; when the obstruction is complete, Cæsarean section is indicated. Of the three methods, the conservative gives the best results, the infantile mortality being 11.5 per cent., against 50 per cent. of the expectant treatment. Or, out of sixty mixed operations forty-four children were born alive (70.3 per cent.), showing that any of the operative measures for delivering the fetus is superior to the expectant treatment.

In the doubtful cases the fetus may be near the period of viability and the mother's chance hopeful. In that case gestation might be continued until the child is viable, when the uterus should be evacuated and afterwards removed. This opinion is sustained by the success attained in operations done in the puerperal state, all the hysterectomies recovering.

Thus, a short summary shows that vaginal hysterectomy should be safe in the early months of pregnancy and the puerperal state, when there is a reasonable hope for the mother.

The abdominal hysterectomy should be done under the above conditions when the uterus is too large to be rapidly and safely removed through the vagina.

That at or near the end of pregnancy Cæsarean section (conservative) should be resorted to when the child's interest is to be considered.

That Cæsarean section with Freund's operation is permissible when the disease is confined to the uterus and the child viable.

That in doubtful cases cutting of the cervix and rapid delivery may be judicious when the incision can be made in unulcerated or non-infiltrated tissue.

That as there are four chances to one against the life of the fetus, and as an equal or greater number of mothers may be ultimately cured in the early stages of the disease, the safety of the fetus should not be allowed to hazard the life of the mother.

And that, upon the other hand, the futile efforts directed to the interest of the mother when her case is hopeless should not jeopardize the safety of the fetus in the latter months of pregnancy.

186 *South Pryor Street.*

TREATMENT OF ABORTION.*

BY J. W. LONG, M.D., RICHMOND, VA.,
Professor of Diseases of Women and Children, Medical College of Virginia.

A consideration of this subject involves many interesting questions. Of these I will discuss but a few, and briefly.

1. *When is abortion inevitable?*

This question settled, the course to be pursued will be clear. Uterine pains and hemorrhages have been considered as sure evidences that abortion will occur. That this is not always true is easily proven. I recall one case that bled from the first till after the third month (with recurring pains) that went to term. Scanzoni reports a case in which occurred profuse hemorrhages on the third month, and in spite of ergot, the tampon, use of the uterine sound, and an intrauterine injection of solution of perchloride of iron, the case went on to term. Noble† was called to a case that resisted the repeated applications of pure carbolic acid to the endrometrium. Better indications that abortion is inevitable are, dilatation of the os and descent of the ovum. Escape of the liquor amnii, or septic infection, may be considered positive proof that the expulsion of the fetus is inevitable.

2. *Treatment when abortion is not inevitable.*

Rest, quiet, and opium are the sovereign remedies. A friend of mine kept a patient under the influence of opium the entire last seven months of her pregnancy. Pains would begin whenever the drug was discontinued, nor did she become an opium habitué.

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*Read before the Richmond Academy of Medicine and Surgery, February 25, 1896.

†A Consideration of Certain Doubtful Points in the Management of Abortion. Dr. Chas. P. Noble.

3. *Inevitable abortion.*

The plain indication here is to empty the uterus, which, according to the classic maxim, is not complete until the fetus, placenta, and all clots are removed. Many times nature herself is able to do this, and only when she fails are we to interfere.

By far the best instrument for removing the products of conception is the finger, aided by the other hand depressing and steadying the fundus from above. In those cases where the cervix is not patulous, it becomes necessary to dilate the cervix with a steel dilator. Then the cavity is to be explored by the finger or curette, followed by a copious irrigation and a pack of iodoform gauze.

Sometimes one is in doubt as to whether the uterus is empty. Especially is this true of abortions in the third and fourths months. The ovum passed intact is evidence that the uterus is empty. A patulous cervix and continued bleeding indicate that something yet remains in the uterus.

4. *Septic abortion.*

In cases of this kind, delay is inexcusable. Many deaths may be put down to the credit of the let-alone, waiting, non-interference policy. The products of conception broken up and infected, as in criminal abortion, present the ideal condition for producing general sepsis. Not only should the products of conception be removed, but also the infected maternal membranes. The gaping lymphatics and open fallopian tubes will continue to spread the infection as long as any remains in the uterus. Therefore the necessity for a thorough cleansing. In most instances this can only be done by the curette. In more advanced cases the finger is a safe guide, because sentient. Thorough irrigation and packing are also essential.

I have not stated that all operative or explorative procedures in the uterus must be done under strict antiseptic precautions, as this goes without saying, and is hardly pertinent to the question under consideration.

I doubt that it is justifiable to curette more than once in these cases; indeed, I question whether or not uterine irrigations should be continued longer than one or two days, and it is quite probable that in these cases where the local inflammation involves the periuterine to a marked degree, the manipulations necessary to intrauterine irrigation do more harm than good.

5. *When shall further operative procedures be instituted?*

Hysterectomy for puerperal sepsis is one of the burning questions of the day. The advocates for it have not yet made out their case, but have established just claims to be heard. The most that can be said, at this writing, for the operation is that hysterectomy is indicated in those cases of sepsis where thorough irrigation and curettage have failed to modify or abate the general sepsis and *the local septic inflammation is confined to the uterus.* I emphasize the words in italics, for thereupon will depend the result. Two such cases were reported by Dr. Cartledge, of Louisville, at the Washington meeting of the Southern Surgical and Gynecological Association, the uterus in each case being honeycombed with septic abscesses.

Vaginal incision and drainage is an operation of great value in just those cases where hysterectomy is contraindicated.

I have described the indications and technique in a paper read by title before the Southern Surgical and Gynecological Association, at the Washington meeting in November, 1895. By this method the sodden, septic pelvic tissues are drained of the sepsis, and the general system is also relieved.

I AM not an agnostic in medicine, though I do not believe everything that medical quidnuncs tell me. My repertory of drugs is very small, viz.: mercury, arsenic, iron, tartarized antimony, sulphate of magnesia, iodine, opium, quinine, chloroform, chloral, nux vomica, the bromides and synthetic remedies. These are my whole armamentarium, although I can easily manage with less, provided I have the assistance of cold water and the *vis medicatrix naturæ.* All the rest is "leather and prunella."—Dr. JOHN MORRIS, in *Maryland Med. Journal.*

SOCIETY REPORTS.

CLINICAL SOCIETY OF MARYLAND.

BALTIMORE, March 6, 1896.

DR. HENRY M. HURD read a paper on "Paranoia." Dr. Hurd first related a case of paranoia now under his care, and then said, in part, as follows: "In paranoia we have to deal with an original abnormal personality, developing badly and deviating more widely each year from a normal type, until finally the departure from health becomes so wide that a dangerous lunatic is developed, who requires confinement and seclusion to insure the safety of society and the welfare of the community. In the early stages of the disease the delusions relate to encroachments upon the life, health, honor, or property of the patient. Such patients are usually self-centered, and from childhood have been reserved, suspicious, and even hypochondriacal. They are generally badly developed and have the more common stigmata of degeneracy, as a want of symmetry of both sides of the face, a lack of development of the facial bones, giving rise to the protruding chin and "whopper jaw" so characteristic of the descendants of the Emperor Charles V., or unsymmetrical palpebral fissures. They are generally unduly responsive to all external disturbing influences and the development of morbid characteristics may follow comparatively slight disturbing causes. Paranoia develops as an unmistakable disease when hallucinations of the special senses give rise to actual delusions. The delusions are at first, and often for many years, those of persecution, and their character is determined by their habits of life, system of beliefs, and, above all, their antecedent mental development or education. They believe the world to be generally unfriendly to them, and seclude themselves from their fellows. Delusions of poison are very common, and many in consequence confine themselves to a very restricted diet. They do their own cooking often, and take nothing but eggs cooked in the shell, potatoes boiled in their jackets, or milk, which, the world over, is believed to be directly antagonistic to all forms of poison. Sooner or later, however, they are forced by the vividness of their hallucinations to defy their enemies, and then develop dangerous tendencies. Most of the crimes committed by the paranoiac are done at this stage of the disease. The terminal stage of paranoia is what has been happily termed by one writer the stage of transformation by which through a further elaboration of his delusions the patient finally believes he has solved the terrible secret which has heretofore clouded his whole life. He begins to believe that he is persecuted because he is a superior being, and delusions of grandeur, power, and importance replace those of persecution, so that though he may suffer still, he rejoices more than he suffers.

"Writers upon paranoia have made many different forms of this disease; for example, religious paranoia, sexual paranoia, etc., but the essential elements of the disease are the same in all instances. Whatever the form of the disease may be, they all lead to the development of dangerous impulses and threaten the peace and good order of the community where such patients dwell. The majority of crimes, especially deeds of violence, which are committed by insane men are committed by the victims of this form of disease. Personally I have little patience with medical men who, when called upon to give evidence in cases of this character, belittle the gravity of delusions of persecution. It is common to call them harmless, and to speak of these patients as peculiar, "queer," "unbalanced," but as not "insane." As a matter of fact, the delusions of the paranoiac are, next to the impulsive, blind, unreasoning fury of the epileptic, most apt to result in homicide, deeds of violence and outrageous crimes. Every case of developed paranoia should be under custody and control until such time as the stage of transformation occurs.

The time to treat the paranoiac is largely in childhood and youth. All patients who possess a neurotic precocity which is likely to terminate in paranoia should be carefully trained and educated with the hope that the inherent physical and mental defect may be removed by healthy habits of living and thinking. An effort should be made later when hallucinations are developing, and delusions are likely to follow them, to break up morbid habits of introspection by putting a stop to the devices which these patients employ to seclude themselves from the world and to cherish their morbid fancies. When self-control is lost and the patient becomes the victim of systematized delusions, little can be done except to place him under strict control. The fallacy that he is harmless at this stage has cost the lives of many excellent people, and will continue to do so unless the profession takes a more serious view of this class of cases. In the final stage little medical care is required. Such patients are usually cheerful, industrious, and when under proper control, able to contribute somewhat to their own support. Many of the useful laborers in institutions for the insane are of this class."

DISCUSSION.

DR. CHARLES G. HILL: "I am sorry that I did not arrive in time to hear all of Dr. Hurd's paper. There are a number of points in connection with paranoia that make it of interest not only to physicians but to the general public. The first of these is its diagnosis. The term may be so extended as to embrace a great deal, and as we all have some delusions, some have classed the greater part of the human race as paranoiacs. We are generally speaking of special cases, however, where these delusions are of such character as to render the patient unfit to be at large. Another point is the disposition of paranoiacs. No doubt many of them are innocent, and I have known some of the subjects of such delusions all their lives, but notwithstanding which they are able to fill their places in society. Some of these, however, suddenly become dangerous. I remember one case, a man of fifty-one or -two years of age, who, from what he considered a coolness on the part of his wife, accused her of unfaithfulness, and purchasing a pistol went gunning for his most intimate friend. It was then found necessary to confine him, and I had him under my care for five or six months, when, against my advice, he was removed from the institution. His delusions had somewhat abated, or he had at least concealed them, and he has lived in good relations with his wife ever since. On inquiry of his friends, I found that throughout his life he had shown delusions, and had been the cause of various ruptures with his friends. Without any cause he would suppose that some business friend was trying to injure him. The friend would usually try to explain, and then give him up as a "crank." Finally the occurrence mentioned above resulted, probably due to the subsidence of sexual activity on the part of his wife. Under such circumstances as these a paranoiac is always dangerous. I have a case under treatment now of a young man who thought that a prominent man of this city wanted to force him to marry his daughter. He was a man of rather low station in life, and the idea was ridiculous. He was kept at home because he talked of trying to kill the man, but he escaped from his friends, and when found was parading before the gentleman's door with a pistol in hand, and the only thing that had prevented a possible murder was that he was unacquainted with the gentleman he was gunning for. The man came out of his house while he was watching it. This goes to illustrate the dangerousness of paranoiacs. It was the only delusion this man had. The best thing to do would be to confine all paranoiacs in asylums where the régime and regular life would guard them from danger to others, if it did not benefit themselves.

DR. G. H. ROHE: There has been such a dearth of accurate description of this class of cases in English literature that I have been in the habit of recommending to my classes the reading of a novel, which describes it pretty accurately; I mean "Peter Ibbetson." There is no record which better describes a case of paranoia from the initial trouble to the delusions and ultimate result, the crime. Dr. Hurd, so far as I am aware, gives the first classical description of paranoia in English. I am glad that Dr. Hurd laid such stress on the dangers of this disease, for indeed it is like the old description of a gun, "dangerous without lock, stock, or barrel." The non-dangerous one, in my opinion, does not exist. When he passes the first stages, and arrives at that of grandeur he may be, if under observation, no longer a serious menace to others, but so long as he is under the force of delusions he is a menace to society and should be confined. I appreciate very thoroughly the disgust that Dr. Hurd feels for the physician that deliberately talks of the "harmless crank," as if because a man is not a maniac he can be allowed to go about his business, particularly if he shows some good business sense. These individuals may be the most dangerous kinds of insane persons. I am a little skeptical as to the value of treatment, even in the early stages. The difficulty is that the abnormally developed and eccentric child, and usually the precocious child, is not brought to the doctor for treatment, but is held up as a good example to others, and the doctor's advice, if it be to repress this precocity, is not usually followed; still such advice should be given when the opportunity offers.

DR. E. N. BRUSH: I agree most thoroughly with Dr. Rohe that the Society is to be congratulated on having heard this paper, but I would like to add that this is not the first of Dr. Hurd's publications on this subject. I am glad to hear Dr. Rohe speak of this novel, for I know of no better description of this disease in any text-book. To-night I passed a man on the street breathing out talk of fire and murder, and saying if I catch him I'll kill him. I turned to a shopkeeper in the neighborhood and was informed that he was a harmless "crank." I inquired further and found that for several years this man had labored under the delusion that people were putting bugs in his bed and that they crawled up his spine and disturbed his brain. Judge Harlan told me that I would be justified in arresting such a man on the street, but I did not feel like picking this man up to-night.

DR. A. K. BOND: The part of this subject that most interests me is its cause and possible prevention. I do not suppose that particular forms of insanity are inherited, but judge that it is simply some underlying brain weakness that produces one or the other of the forms of brain trouble. If that is so, then the securing of healthier infants is the way to do good, and that might be done by promoting the nutrition of the mother during pregnancy. It is known that a woman who produces an idiot at one birth may produce a perfectly healthy child at the next, if her nutrition is kept up to a high mark, so I think in these neurotic families the doctor should take more care in that direction. As to the treatment by confinement, probably the best thing we could do for the State would be the building of a sanitarium for nervous diseases where the patient who goes in is not branded for ever afterwards as insane, as is the case with a patient to either of the present State institutions. We want the benefit of hospital treatment without the usual stigma. One thing I would like to know is whether there is any particular symptom that will direct your attention to paranoia, and I would like to ask also whether in the early stages nutrition of the brain would do good towards preventing the disease, or whether it is a disease certain to advance.

DR. H. M. HURD: I think it may be said that no child is born insane, but all neurotic children are born with a predisposition to insanity, and this tendency may be eradicated by surrounding the child with good and proper influences, and by sensible systematic education. Many neurotic children escape disease because they are educated and cared for by judicious people; in the case of the paranoiac there is beginning in intrauterine life some defect, it may be in the nutrition in the brain cells themselves, but more likely in the symmetrical and harmonious development of the brain. This may be due to pressure of the bones of the skull through premature ossification, or to an unequal development of the bones of the skull or face, as a result of which the brain nutrition is interfered with and it fails to develop properly. It is to be borne in mind that while this may be so it does not necessarily follow that such a child will inevitably become paranoiac. I am sure that these inherited tendencies can be overcome by proper effort made to nourish, strengthen, and develop a congenitally weak brain. As to the appearances which suggest paranoia to the physician, I would say that he must rely upon the usual stigmata of degeneration, the lack of symmetry in the skull, or about the face, the inequality of the palpebral fissures, the character of the ear and the general shape of the lower part of the face.

DR. H. O. REIK,
Secretary.

525 *N. Howard street.*

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

MAY 26, 1896.

Regular meeting, Dr. J. N. UPSHUR, first vice-president, in the chair.

The special order for the evening was the discussion of "Bovine Tuberculosis: Its Relation to Public Health," by WM. S. GORDON, M.D., of Richmond, Va., Professor of Physiology, University College of Medicine.

In laying this subject before you for consideration I have divided it, for clearness and convenience, into seven heads.

1. *Do cows, etc., have tuberculosis?*

There can be no doubt of this in the mind of any person who has attended a *post-mortem*. The question need not be discussed from a local point of view, but from a world-wide one; but being answered so emphatically in the affirmative, it would hardly be worth while to go into it.

2. *Is it transmitted to animals?*

Sooner or later animals which are injected with juice of infected meat have the disease. In only one instance has an observer reported that he was unable to produce the disease by injection. An Italian experimenter states it cannot be communicated to birds. Sheep and goats, particularly the latter, show well-marked tuberculosis.

I quote the rules and regulations of the Copenhagen Milk Supply Co. to show how it is sought to prevent transmission. Reports show cases of congenital tuberculosis in calves; but if a calf of a tuberculous cow be fed with uninfected milk it may be reared in a healthy condition.

Semen of a tubercular human injected into a guinea-pig has produced tuberculosis.

3. *Can it be detected?*

It is not absolutely determined that tuberculin is an infallible diagnostic agent, but the Massachusetts State Board of Health says that, in connection with physical signs, it never fails to diagnose; that implicit confidence may be placed in it, and that the reaction is not always in proportion to the stage of disease. A French observer states that inoculation is the one method capable of giving results free from ambiguity. It is a well-known fact that at times patients may be dying of phthisis and yet the sputum does not reveal it.

To show the value of tuberculin, statistics prove that out of fifty-three animals injected, forty-one gave the reaction, and of these thirty-eight proved to be well-marked cases. Many other instances may be quoted with like result; and, taking all things into consideration, we see that tuberculin diagnoses almost infallibly.

4. *How are herds infected?*

Dr. Harbaugh states that intestinal tuberculosis is more dangerous than that of the glands or lungs. The animal has diarrhea, the discharge dries, mixes with dust, is stirred up, breathed and taken in with the food. He claims this is the common method of infection.

5. *Are tubercle bacilli found in spermatic fluid and milk?*

Referring to the human being, reports are somewhat contradictory, but it is a fact that seminal fluid may transmit the disease even where there is no lesion of the genito-urinary tract. The bacilli are not always found in milk, but by means of the centrifuge they have been demonstrated. Ashmead has shown that killing off the tuberculous animals and keeping children from the milk has increased the longevity of life and caused a decrease of tuberculosis.

It is claimed that milk is not only dangerous because of bacilli in it, but also because of toxins generated by them. Armstrong holds that milk is more apt to infect than meat. Brush says the chronic forms of tuberculosis are not easily recognized, and that the necessity for more practical knowledge is evident. Exlius thinks it significant that a coincidence exists between tuberculous milk and meat and human phthisis.

6. *Do animals infect human beings through infectious milk and flesh?*

Concerning milk, observers quoted, and others, say it does. The juice of infected meat injected produced the disease, as cited in the foregoing. Law, of Cornell, says the cooked meat and milk of infected animals are dangerous because of the ptomaines in them, citing cases to that effect. Calves sucking tuberculous cows did not thrive, and in those which survived calcified tubercles were found. Another observer states there is but little danger, but the animals used in experimentation were those not easily affected. It is the consensus of opinion of the College of Physicians and Surgeons of Philadelphia that children are apt to be affected by intestinal tuberculosis when fed with infected milk. Fair says the germs are not killed by boiling, a protective coat of coagulated albumin being formed around them.

7. *Does tuberculin harm healthy cows?*

This is an important question, and not only from a hygienic but also a monetary point of view. I am not now prepared to discuss it.

DISCUSSION.

DR. PAULUS A. IRVING rose to substantiate in a practical way the authorities and citations given. There is hardly a doubt that bovine tuberculosis may be transmitted to man. It is the chief cause, especially in children. A practical demonstration by Dr. Niles, State Veterinarian, on the Grant herd, eight miles from the city, was witnessed by him. Out of fifty cattle injected, fifty gave the reaction; and these Mr. Grant decided to kill. *Post-mortem*, in every instance, showed marked signs of the disease. Two, one a large, healthy-appearing bull, evidenced tuberculosis, not only in the cervical but in the mesenteric glands and lungs. The remaining seven could be diagnosed almost on inspection. All killed were thoroughbreds.

To test the reliability of tuberculin, a purse was made up by the gentlemen present, and a cow that had been passed as healthy, but which was the worst looking of the lot, was purchased and killed. Not a sign of tuberculosis could be discovered. A calf of four or five months was taken from one of the slaughtered animals and examined, and it presented no appearance of the disease.

DR. JNO. N. UPSHUR thinks it incumbent on us to allay the panic now in existence in this community regarding tuberculosis. There is no doubt we should have an inspector, but improper food and drink may be taken in and digested, the poisonous principle being killed by the juices. The majority of those who within the past ten years have died in Richmond have had a minimum amount of milk and meat. He doubts if any physician present has traced a case of consumption to milk or meat. He doubts the contagiousness of tuberculosis; believing its starting point to be in malnutrition of the system, making a fertile soil for the development of the bacilli. There recently appeared a statement that the secretions of bronchitis is antagonistic to the germ. Before the war, one of the most common sights was scrofula in the negro, the older writers asserting that consumption was comparatively rare. Why were not they affected since the war? All conditions surrounding them have changed—malnutrition, overcrowding, etc., the result being phthisis, which will eventually kill the race.

DR. HUGH M. TAYLOR remarked that if it be necessary to come to some tangible conclusion, it is better for the people to be panicky. The question resolves itself into, "Are you willing to drink the milk or eat the meat of a tuberculous cow? Are we, as doctors, willing to continue delicate children on tuberculous milk, and advise our patients to eat tuberculous meat? He has been asked for advice: then, he tells of dairymen who have clean bills of health, and counsels dealing with them. He is not interested in the delicate points; and he hopes the matter will be settled by agitation, for in this way only may we have proper laws enacted. He has no doubt as to the contagiousness of tuberculosis. Time after time, he has seen a healthy wife nurse an infected husband, and *vice versa*, only to follow the deceased to the grave from the same cause.

DR. UPSHUR said he did not wish it to appear that he was opposed to legislation on the subject. He objected to the production of a panic by trying to make the danger seem greater than it really is. Milk and meat are constantly subjected to boiling; and there are vital processes that antagonize the poisonous principle.

DR. J. S. WELLFORD agrees with Dr. Upshur that consumption is not contagious, and he can cite cases to prove it. One man had three wives to die of consumption, but he never had it. He can give instance after instance where members of families with a tendency have married healthy people, and never had it, although nursing tuberculosis. He agrees with Dr. Upshur regarding the harm produced among the laity by agitation of the subject. He believes tyrotoxicon has killed more infants and children than tuberculosis.

DR. JACOB MICHAUX has not the slightest doubt as to the contagiousness of tuberculosis. Like Dr. Taylor, he has seen husbands contract it from their wives and *vice versa.*

Concerning its relation to food, every effort should be made to impress on lawmakers the importance of laws to restrict the sale of milk and meat.

DR. GORDON, in closing the discussion, remarked that he differed with Drs. Upshur and Wellford as to the contagiousness and infectiousness of tuberculosis, believing that the disease has been proven to be both contagious and infectious. The preponderance of testimony is on this side of the question; and it is impossible not to accept the numerous and convincing operations and experiments made by the leading medical minds of the world to uphold their position. It is unscientific to argue that the disease is not contagious, because heredity frequently has some influence in its production. It is misleading to state that tuberculosis is not conveyed by milk and meat, because all who drink the milk or eat the meat of tuberculous animals do not contract the disease. It would be equally as illogical to conclude that all the inhabitants of a given section should present manifestations of malarial poisoning because a few persons did not suffer from breathing the infected air. The fact that the bacilli may not be detected in every examination of sputum, does not in any way invalidate the views held of the infectious nature of tuberculosis, whether the bacilli be the cause or the result of the disease. It must be remembered that the bacilli are found in the vast majority of cases; their absence from any given sample of sputum does not imply that they are not present somewhere in the respiratory tract, and if none at all were found, it would not follow that the specific cause of tuberculosis was the germ *per se*, and that the poison, whatever it is, might not be conveyed by infected milk.

He could not state from personal experience whether tuberculin ever had a deleterious influence upon healthy cows. The experiments made by veterinarians, however, go to prove that they are correct in asserting that no harm is done.

The reasons why the negro, and especially the mulatto, is more liable to the disease at this time is because, for many reasons, his system is unable to antagonize the poison, and because there is more of the poison in his surroundings. The practical point to be considered is, how shall we get rid of the exciting cause which, added to the predisposing causes, lights up the disease? It is often impossible for us to control predisposing causes, but, fortunately, we are often able to remove the exciting factor.

He could not agree with Dr. Wellford that tyrotoxicon kills more infants than milk of tuberculous cows. The facility with which germs are absorbed and multiplied in milk; the demonstrated presence of the tubercle bacilli in milk; its wide-spread use as a food; the known and proven fact that so many infants and children die of tuberculosis—all these facts present us with the strongest circumstantial evidence that could be desired.

DR. GORDON said he did not wish to help in causing a panic, but if people were obliged to get into a panic because they are told simple truths in order to educate them, and save their lives and the lives of their offspring, then it might be best to have a panic. The panic would not do as much harm as the tuberculous meat and milk. As for the dairymen, he was anxious to get some legislation which would be beneficial to them as well as the community. If possible, he would have the owners paid for the condemned animals. The laws ought to bear equally on all; and he was sure our dairymen who wish to know the truth and act upon it for their own sakes as well as for the sakes of their patrons, would be willing and anxious to adopt a measure by which the whole community would be benefited.

MARK W. PEYSER, M.D.,
Sec'y and Reporter.

CORRESPONDENCE.

MEDICAL NEW YORK.

NEW YORK POLYCLINIC, July 10, 1896.

This is rather a dull season in medical New York. It is New York's vacation. The schools have closed, many of the professors are off at their summer homes or have gone abroad, the festive medical student has vanished, and even patients, I am told by medical friends, are distressingly scarce. But New York's great tenement-house multitude has no vacation; they are still here, and the hospitals and clinics and dispensaries continue to do a land-office business every day. The Polyclinic and Postgraduate schools are now in the midst of their summer sessions, the clinical lectures being delivered for the most part by the adjunct-professors; and while the physicians in attendance are few in number at this season, it gives those who are present a better opportunity of examining and studying, under skilled direction, a great mass of interesting clinical material. With the Eye, Ear, Nose and Throat department of the Polyclinic, the Manhattan Eye and Ear Hospital, the New York Eye and Ear Infirmary, the New Amsterdam Eye and Ear Hospital, the Demilt Dispensary (Nose and Throat department), and other institutions of like character, the medical sojourner in New York, who is interested in the eye, ear, nose, and throat, need not want for work and study. In another letter I shall have something to say of the teachers and the teaching in these institutions.

MORE LIGHT ON ANTITOXIN.

The New York Academy of Medicine has devoted two entire evenings of late to a discussion of the results obtained by the antitoxin treatment of diphtheria in hospital practice. Nothing was more noticeable in this discussion than the contrary, but conscientious, opinions which are still held by some of our best men. Dr. Joseph E. Winters, who has been perhaps the most vigorous opponent of the method in this country, presented an elaborate paper upon his own "Clinical Observations upon Antitoxin, and a Report of a Personal Investigation of this Treatment in the Principal Fever Hospitals of Europe during the Summer of 1895." He showed how the oft-quoted statistics which appeared to indicate such a remarkable reduction in the death-rate from diphtheria, were fallacious; how the disease varied in type and severity at different times; how a diagnosis of diphtheria was sometimes made when the disease was really not present, but recovery attributed nevertheless to the use of antitoxin; and how the use of antitoxin in some cases had not only been neither curative nor prophylactic, but had been injurious or even fatal in its results. He quoted from a number of well-known physicians in private practice who had tried and abandoned the treatment. He said also that those who have carefully watched this treatment in hospitals, and who formerly were earnest advocates of it, were now, after wider experience, opposed to it. He predicted that the time would come when every one would realize the truth of his position in regard to antitoxin.

At the same meeting of the Academy Dr. P. H. Ernst gave some of his "Personal Experience with Antitoxin." He reported seventy-seven cases of diphtheria, twelve treated with antitoxin and sixty-five without. He did not believe that antitoxin exerted any favorable influence whatever. Indeed, he thought that patients who recovered under this treatment had a more tardy convalescence than patients without it. A conservative paper was read by Dr. W. L. Stowell upon "Diphtheria with and without Antitoxin," in which it was shown that antitoxin could not claim better results than had been gotten by other methods of treatment. He quoted Jacobi, Huebner, Seibert, Rosenthal, Loeffler, and others, who had used formic chloride, carbolic acid injections into the tonsils, mercury, toluol, dioxide of hydrogen, and other well-known methods, with death-rates ranging from three to sixteen per cent. It was not claimed that antitoxin could do better than that.

On the other hand, Dr. W. H. Thomson read a paper, based upon late statistical compilations, giving the results obtained in a large number of hospitals. In 85 hospitals in differents parts of the world there had been 9,893 cases of diphtheria treated with antitoxin, and 1,820 deaths; and mortality of 18.3. In 53 of these hospitals, where the mortality had formerly been 44 per cent. 7,277 cases treated with antitoxin showed a death-rate of only 20 per cent. Dr. Thomson stated that the verdict of the medical world, after a trial of one year and a half, was favorable to antitoxin, and he believed that it marked a great advance in the practice of medicine.

In the discussion of these papers Dr. John W. Brannan vigorously attacked the statements and conclusions of Dr. Winters, particularly as regards the experience of antitoxin in the Willard Parker hospital. He showed the fallacies also in several of Dr. Winters' quotations from foreign hospitals. Dr. A. H. Smith presented some figures from boards of health in this country, giving report of 5,120 cases treated with antitoxin, and a mortality of 10 per cent.; formerly in the same cities the mortality had averaged 40 per cent. He was in favor of the treatment. Dr. Berg stated that while hospital statistics were not reliable, he was a believer in antitoxin from his experience in private practice. Dr. W. H. Park agreed with Dr. Brannan, and disagreed with Dr. Winters as to the results obtained at the Willard Parker hospital by the antitoxin.

A composite opinion of the members of the Academy who have taken part in the discussions upon antitoxin is certainly favorable to this method of treating diphtheria. Some members still prefer to take a conservative stand, awaiting further developments, and doubtless this is wisest at present. Indeed, in personal conversation with medical friends here, I find many of them who think the value of antitoxin is still *sub judice.*

Simultaneous with this discussion in the Academy comes the report of the American Pediatric Society's Collective Investigation into the Use of Antitoxin in Private Practice (made at the late meeting of the Society in Montreal, May 26). Circulars sent out by the Society in April met with responses from 613 physicians in 114 cities, in fifteen States, the District of Columbia, and Canada. Cases were also reported from the Health Departments of New York City and Chicago. There was a grand total of 5,794 cases, with 713 deaths, or a mortality of 12.3 per cent. Of these cases 218 were moribund at the time of injection, and died within twenty-four hours. If these be excluded, the mortality is reduced to 8.8 per cent. Of 4,120 cases injected during the first three days there were 303 deaths—a death-rate of 7.3 per cent. If from this number cases be deducted which were moribund at the time of injection, the mortality becomes 4.8 per cent. The report emphasizes the importance of early injections, within the first three days. When the larynx is involved in the diphtheritic process, the effect of the serum has been to arrest the extension of the membrane. This was noted by more than 350 physicians. Therefore it has been necessary to resort to intubation or tracheotomy less often than when antitoxin was not used. Moreover, in the experience of several operators when the use of antitoxin and intubation were both practiced on the same patients, the mortality has been only half as great as when intubation alone was done. It appears, then, that the serum has saved double the number of cases of laryngeal diphtheria that have been saved by any other method of treatment. In the majority of cases reported only one dose (injection) was given; in severe cases, two or three.

More than 600 of the physicians contributing to this report are strongly in favor of the treatment, the majority enthusiastic over it. There was no evidence to show that antitoxin was productive of any harmful results in the way of broncho-pneumonia, cardiac depression, nephritis, or disturbances of the nervous system.

The friends of the antitoxin treatment certainly have good reason for encouragement in this report. The committee of the Society will continue their work for another year, and they solicit the further coöperation of the profession in their endeavor to arrive at the truth. The Society's first report is published as a supplement to *Pediatrics* for July, to which the reader is referred for details.

X-RAY PHOTOGRAPHY.

I had the pleasure, several evenings ago, of attending a very interesting X-ray *séance* at a meeting of the Brooklyn Medical Society. I was more than surprised at the demonstration. Professor William Stubenbord, of New York, first read a short paper upon the history of this discovery by Roentgen and of its subsequent study and development. He then exhibited a handsome and highly instructive series of X-ray photographs, or skiagraphs, which he had made on various parts of the body, normal and diseased, several of which attested the value of this procedure in surgical diagnosis. One skiagraph was exhibited, of an entire person, taken in four sections; the bony skeleton was complete and distinct, and showed unmistakably a lateral curvature of the spine. A female pelvis was also shown, and the possibilities of this method in detecting deformities of the pelvis became manifest. An old periostitis of the lower extremity of the femur, which had escaped other methods of detection, was also exhibited. A picture of a fractured metacarpal bone, taken through the splints and bandages, was presented. By this method, then, the surgeon can now tell whether or not the ends of fractured bones are in apposition, as they were in the above case. Next there was a beautiful demonstration of this "photography" upon a case present. A boy about twelve years of age had been shot some months ago, the pistol-ball entering through the outer extremity of the right eyebrow. All efforts to locate the ball proved fruitless, though it was supposed to be situated somewhere in the frontal sinus. Soon vision was lost in the corresponding eye. Here was a good case for the X-ray. The boy was laid on his right side on a table, with his head on a hard-rubber plate, which covered over the sensitive photographic plate. A strong static electrical machine was then set in motion, and copper wires were attached to the two poles. The other ends of these wires were then attached to the poles of a Crookes' vacuum tube, or bulb, and the latter made stationary about sixteen inches above the patient's head. The electric current produces in this bulb an appearance more like a phosphorescent glow than a bright light. This "light" is now called the "cathodal streamer." After an exposure of thirty minutes the photographic negative was developed by the usual process, and a round object was discovered in a position which was thought to be between the eyeball and outer wall of the orbit.

The entire demonstration of the evening was full of the greatest interest for the medical spectators, both from the scientific interest attaching to this marvelous discovery and from the avenues of possible usefulness which it opens up as a method of surgical diagnosis. The collection of skiagraphs, as well as the practical application of the process, as presented at this meeting, was said by the President of the Society to be the best X-ray exhibition yet made in this country.

It must be remembered that this discovery is as yet only seven months old. No doubt it will be rapidly studied and perfected, and however valuable it may be even now as a diagnostic resource for the surgeon, it will certainly become more and more so as our knowledge of it is extended.

Since the above was written Dr. Stubenbord has kindly shown me in his office the finished photograph of the boy's head, with the bullet clearly outlined in the position above named. An operation will soon be made to remove the bullet. Dr. Stubenbord has done more than any one else in this country to bring the Roentgen photography to the aid of the surgeon. His office is elegantly fitted up for this purpose. He is now preparing, by request, an elaborate paper on the subject for the Academy of Medicine. Cases of foreign bodies in the tissues, or of suspected bone or joint disease or deformity are submitted to him almost every day for diagnosis. He is enthusiastic over the new photography, and believes that it is as yet only at the beginning of its usefulness.

L. B. GRANDY, M.D.

NEW YORK LETTER.

NEW YORK, July 15, 1896.

In glancing back over the recent work of our medical societies, one is impressed with the great activity of those devoted to specialties as compared with those not so limited. It would seem as if one of the familiar axioms found in our books on mathematics had, after all, become twisted in some way, and that a part must now be considered greater than the whole. We are reminded of an amusing "card," now going the rounds of the medical press, in which a physician advertises that he is engaged in a new specialty, "general medicine." There is a deal of truth and food for sober thought in this joke, for, in this city at least, specialism runs riot. It may be permissible, however, to refer to a topic of some general interest in this "new specialty"—I refer to the treatment of heart disease.

This has recently been made the subject of papers by Dr. W. H. McEnroe and Dr. William H. Thomson. The former called attention to the benefit to be derived from combination of well known cardiac stimulants. Thus, digitalis, by prolonging the systole and shortening the diastole, causes the heart to remain small while under its influence, but its effect in causing a contraction of the arterioles, and so increasing the peripheral resistance, must be neutralized. This is accomplished most effectually by combining nitroglycerine with the digitalis, in doses not exceeding $\frac{1}{100}$th of a grain. It is perhaps not very widely known that iodide of potassium, in doses of five grains three times a day, freely diluted with milk, is an excellent vascular stimulant, although this action is rather slowly developed. Where it is indicated, nitrate of amyl may be given freely. Dr. McEnroe said that he had known as much as sixty minims to have been given at one time, by inhalation, without any harmful result, and with positive benefit to the patient. For the insomnia of advanced heart disease, morphia is the best remedy. It should be given in doses of one-fourth of a grain, combined with twenty grains of the bromide of sodium. Where constipation or other conditions make it desirable to avoid morphine, one-fourth to one-half grain of codeine may be substituted. Trional will be found an excellent hypnotic, in doses of ten grains, alone or combined with a small dose of morphine. Dr. Thomson said that for a right understanding of the treatment of heart disease, we should divide these cases into primary and secondary. Primary heart disease arises almost exclusively from rheumatism and chorea. The younger the patient, the more likely is a slight cardiac lesion to develop into a serious structural alteration. The reason that the endocardium is so much more liable to become the seat of fibrinous deposit and permanent lesion than are the joints, as a result of acute rheumatism, is that the heart is in incessant motion. The first slight fibrinous deposit becomes a source of constant irritation, just as do the granulations on the eyelid, and, as a result, the lesion of the endocardium is progressive. In the treatment of primary heart disease, the first place should be given to rest in bed.

Where this alone is not sufficient to bring down the pulse-rate, and so secure to the heart the much-needed rest, aconite should be administered. It is not only a cardiac sedative, but is capable of markedly relieving inflammatory pain. It will be found most valuable in slowing the heart's action and relieving the dyspnea, and, like other vegetable nervines, its action on the heart is no more permanent than that of tobacco. For the dyspnea of mitral stenosis belladonna will be found useful, as the characteristic action of this drug is to restore rhythmical action to unstriped muscular fiber. It is advantageously combined with strophanthus and sparteine. The prophylactic treatment of cardiac disease should not be overlooked. Cases of acute rheumatism and of chorea should be treated by prolonged rest in bed, for the cardiac lesion is often slow in announcing its presence. This is particularly true of chorea, and hence it is of great importance that the prudent physician should carefully examine the heart of such patients at intervals after apparent recovery from chorea. It will be found sometimes that the patient will recover from the chorea with no evidence of disease of the heart, and yet, after an interval of perhaps one or two years, there will be evidence that the heart has been damaged. It is hardly necessary, therefore, for the writer to emphasize the advice given regarding the keeping of such patients under medical supervision for a considerable time—"forewarned is forearmed." Again, rheumatic individuals should be taught the importance of always protecting the body from chilling by wearing good flannels, both by night and day. This seems to be a trite remark, but we think it would not be difficult for most of us to recall instances in which patients have been very careful about wearing flannel as a protection to the skin in the daytime, but who have discarded such protection at night, wholly unmindful of the many opportunities for catching cold during sleep by tossing off the clothes and exposing the surface of the body to draughts of cool air. Dr. Thomson reminds us that when a rheumatic individual develops the first sign of a tonsillitis, much can be accomplished in the way of prophylaxis by the application of tincture of iodine to the throat, and the prompt internal administration of the salicylates. In all cases of chronic heart disease, he says, we should bear in mind the evil effect of anemia; but this does not necessarily imply that we must pour iron into these patients, simply because we have discovered that their mucous membranes are pallid. In febrile anemias, such as phthisis, rheumatism, and pernicious anemia, iron is likely to do more harm than good. The blood corpuscles may be fed in other ways. In rheumatic anemia especially, cod-liver oil is more apt to prove of benefit than iron, and occasionally arsenic will lend a helping hand. Dr. Thomson emphasizes the fact that the secondary diseases of the heart generally begin in disturbances of the peripheral circulation. As a result the heart undergoes hypertrophy, and subsequently degeneration and dilatation. In the therapeutics of this class, fresh air must be given a prominent place. Hours spent in a dry, equable air give strength to the weakened cardiac muscle; and this should be the object of our treatment. When the heart becomes dilated, the pulse grows rapid, not as a result of irritation of the heart itself, but of the inability of the heart to empty itself at each stroke. Here, instead of prescribing rest in bed and aconite, we should advise systematic and gradually increasing exercise, and internally digitalis. After a few weeks of properly applied massage, with proper resistance on the part of the patient to these movements, Dr. Thomson says he has seen a very marked improvement in the breathing. The digitalis should be combined with nitroglycerin, and its action is often greatly assisted by giving about half a grain of calomel, three times a day, up to signs of mercurialization. Opium is a most valuable heart stimulant for occasional use. These cases are often kept on a fluid diet, but it should be borne in mind that the cardiac dropsy may be made to disappear by restricting the quantity of fluid ingested.

Another subject, always interesting and of practical bearing to the general practitioner, is obstetrics. Dr. J. Milton Mabott, in a recent brief paper, stated what he styled "Three Warnings of Interest to Obstetricians." The first was, that physicians should always warn pregnant women under their care to report at once the occurrence of any hemorrhage from the vagina, however slight. He had seen two deaths due to a neglect of this precaution. He next advises the physician to warn parturient women to refrain from handling their genitals during parturition and the puerperium, as he believes that he has met with a fatal case of pyemia due to such self-examination. His last plea was that it was the duty of the physician to warn nursing women that they should never allow themselves to fall asleep with the baby at the breast. His reason for uttering this warning was, that deaths from overlying were almost criminally common. Providing the infant with a separate bed had been found to not entirely remove this danger. In the discussion of this paper, Dr. E. A. Tucker said that the good sense of these warnings could not be disputed, but as he had known an intelligent nurse to nearly lose her life from a failure to report the occurrence of hemorrhage during pregnancy, he was skeptical as to the good results to be attained by pointing out these dangers. Dr. P. A. Harris called attention to the rarity of cases of puerperal septicemia among Southern women attended by the negro midwives, among whom there was an unwritten law forbidding vaginal examinations. Dr. Brooks H. Wells said that the same thing had been noticed among the Indians of the West; the refraining from making vaginal examinations apparently more than counterbalanced the danger of being confined in their filthy hovels. Dr. Marx said that he thought some cases of puerperal sepsis, occurring among the lower classes, arose from indulgence in sexual intercourse shortly after labor.

Under the title of "*Non nocere* in Obstetrics," Dr. Julius Rosenberg spoke of certain meddlesome practices in modern midwifery which had received the sanction of high authority. In the relentless war now waged against pathogenic germs it is not uncommon for the combatants to go beyond the bounds of prudence and common sense, and certain thoughtful obstetricians of the present day believe that this remark applies with perhaps greater force to obstetrics than to general surgery. Thus, as Dr. Rosenberg says, it has been found that in normal pregnancies the vaginal secretion is not only free from pathogenic germs, but is inimical to germ life, yet many obstetricians insist upon giving an antiseptic vaginal douche at the beginning of labor. To this he objects, as well as to the routine use of such douches after labor, in the absence of distinct indications for them. He says, and I think the experience of many others will indorse the statement, that these douches are often the very cause of the woman becoming infected. Another example of modern meddlesome midwifery, Dr. Rosenberg thought, was to be found in the practice of subjecting to operation cases in which pregnancy is complicated by uterine fibroids. He had attended six such cases, and has saved the lives of all the mothers, and of all but one child. Statistics of operative interference, he said, could not make as good a showing. Although these fibroids are often quite large during pregnancy, they are prone to diminish after parturition. That his personal experience should not stand alone as an argument for non-interference in these cases, he had searched the literature of the subject, and had, he thought, found sufficient justification for the statement, that fibroid tumors do not seriously complicate many cases of pregnancy.

In discussing the paper, Dr. Robert A. Murray said that there were many germs in the vagina, and if these were not removed by an ante-partum douche of some antiseptic solution, infection was liable to occur through a laceration of the canal. Unless the external genitals were carefully cleansed, the examining finger could not long remain aseptic.

Dr. Rosenberg replied that in tenement-house practice, he believed that antisepsis in obstetrics should be restricted to the examiner's hands and the woman's genitals.

To these statements the writer would add that in his humble opinion much more emphasis should be laid upon the dangers of post-partum curetting, in this class of practice particularly. Without wishing in any way to belittle the beneficent results obtained by such curetting, he thinks that more consideration should be given to its dangers. There are not lacking obstetricians of vast experience and excellent judgment, who, though thoroughly alive to the great advances made in modern times in the obstetric art, feel very strongly on this point. They have seen a post-partum curetting, for the removal of a small piece of placenta, followed by a chill, high fever, and all the evidences of fresh and more extensive infection, and they have observed these symptoms and signs aggravated by another curettement. It has been all too plain that the curetting has served chiefly to open new avenues to infection. It may be urged that this should not occur. Granting this, and also that it rarely does happen *under favorable surroundings and conditions*, still it cannot be denied that it does occur much too commonly in obstetric practice among the poor, and that, too, when the curettement has been done by well-known and experienced operators. The writer has recently heard of a fatal case under just such circumstances, and it is by no means unique.

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FISTULA IN ANO.

Operate upon all cases where there is sufficient vitality to heal the wound. Always divide the fibrous membrane at the bottom of the tract, and pack the wound for the purpose of healing with granulation. Always open abscesses early to prevent fistula in ano; when operating in a tuberculous patient, give him the benefit of the doubt. Never fail to examine thoroughly for small branches leading out from the main tract, and examine for an associated stricture which may be the cause of the fistulous tract. Never cut the sphincter but once in any operation, and beware and warn the patient of the danger of incontinence. Confine the patient in bed, and do not trust his care exclusively to a nurse; tubercular cases are an exception in that they demand moderate exercise and fresh air. Physiological rest is the first principle for the relief of all diseases. In all operations involving the rectum, it is good surgery to dilate the sphincter. All cases of fistula in ano should be operated upon preferably by the knife, except where Bright's disease, cancer, cardiac or hepatic disease exists.—B. B. PORTER, in *American Journal of the Medical Sciences.*

IN cases of severe injury to fingers by laceration or contusion, put the entire hand into a very ample soaking-wet dressing. Do not even trim off a piece of flapping skin. Incision for drainage is all that is allowable until healing is very well under way or even quite complete. You may then look over the ground and see whether it is worth while to sacrifice anything. A half-inch of *boneless* finger may be of incalculable value to its possessor.—*International Journal of Surgery.*

EDITORIAL.

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THE TSETSE FLY.

The African continent has suffered more than any other, even than Australia, from difficulties of transport which have kept it, though a close neighbor of Europe and Asia, a laggard in the race for civilization, and won for it the uncomplimentary title of the Dark Continent. Its rivers, owing to the step-like manner in which the high interior plateaux are reached, have afforded little help, for, generally speaking, they are blocked a few hundred miles from the sea by impassable waterfalls; and its low lying coast is frequently deadly to Europeans, while its inhabitants for the most part are warlike savages. But beyond these, it possesses in the tsetse fly perhaps a more powerful barrier to the entrance of the light of civilization than any of these others. It has been said in this connection, that "it is an ill wind that blows nobody good," and hypocritical and jealous editors and others, who profess to see in European intervention in Africa nothing better than "land piracy and territorial greed," apparently find pleasure in dwelling on the above obstacles to this advance of the white man, preferring that the heart of Africa should be eaten out by bloodthirsty Prembehs, Arab slave-dealers, and murdering Matabeles, and forgetting that if priority of occupation be the only criterion of the right to proprietorship, irrespective of form of government and the character of the people, these same self-righteous critics are among the thieves and robbers who have done the aborigine out of his natural birthright.

The tsetse fly (*Glossina morsitans*), a dipterous insect, looks, as every one knows who has taken any interest in the exploration of Central Africa, not unlike a large ordinary house-fly, has its habitat over a great part of the warmer portions of the continent, especially toward the south and center, and has the power of causing death by its bite of the horse, donkey, cattle, and dog. Cattle sometimes recover, but the others invariably die, after suffering from fever, with emaciation, destruction of the red blood corpuscles, and swelling of the neck, abdomen, or extremities from the presence of coagulable lymph. It was thought that the fatal results were due to a poison formed in the body of the fly, but Surgeon-Major Bruce has recently shown that the tsetse acts merely as a carrier of the poison. Susceptible animals may be bitten with impunity by these flies imported and kept away from the fly country, but die when the flies had previously bitten an affected animal, or when bitten by flies living in the fly country. Bruce found that the blood of animals suffering from "magana," or the fly disease, contained a hematozoon, which is identical with, or at least closely resembles the trypanosoma found in the disease called surra in India. The hematozoon is believed to be the cause of death, but its source is still a mystery.

The tsetse fly may be compared to the mosquito, which has been shown to be a carrier of disease in like manner, and other blood-sucking insects may perhaps be placed in the same category.

The ordinary house-fly is a probable carrier of many infectious diseases, such as fevers; and in countries like Egypt, where it swarms with such determination around diseased eyes that those affected learn scarcely to attempt to brush it away, it is of immense importance as a disseminator of contagious ophthalmia.

Probably more attention given to means for the destruction of insect pests would help to eliminate one of the dangers to the public health, as well as make life more comfortable in warm climates.

DEAF-MUTES.

It is not so well recognized as it ought to be that a large proportion of deaf mutes retain a certain amount of hearing power. We say retain, because the majority of these unfortunates are sufferers from the results of aural disease developed before speech has been thoroughly acquired. It is true that in children of deficient intellect speech may be practically impossible, and that these cases are sometimes hard to separate from true deaf-mutism.

In a minority of cases the defect is congenital, and it seems to run in families, without, however, being commonly hereditary. Consanguinity in parents has a more decided influence, and syphilis, maternal impressions, alcoholism, bad hygiene, etc., are probably important factors in its production.

In this country and on the continent of Europe intracranial disease is probably the most common cause of acquired deaf-mutism, and cerebro-spinal meningitis is specially prominent in statistics. But disease of the external, middle, or inner ear, producing deafness, will also produce mutism when the patient is insufficiently advanced in intellect on account of age or natural deficiency. A child who loses his hearing, or becomes distinctly deaf, before the age of four will almost certainly also lose the power of speech, and between four and seven the progress as regards speech will mainly depend on the child's intellectual activity. Totally deaf mutes are the exception, though authors differ as to the exact percentage. The practical point is whether or not sensibility for sound exists to such a degree as can be utilized in teaching. Thus Love found that such sensibility existed in 25.27 of his cases, and Walker (*Med. Fortnightly*, March 2, 1896, and *Annals of Ophthal. Otology*, etc. May, 1896, p. 515,) found that 11 per cent. of the children whom he examined had 30 per cent. and over of hearing. If children could make as much use of their defective ears as adults can these would all have comparatively little trouble, for adults can get along with 7 per cent. of hearing power with artificial aid, but children are unable to put forth the necessary exertion. In New York 5 per cent. are taught through the ear, and in Nebraska an effort is being made so to teach 34 per cent.

When speech cannot be taught through the ears, one must fall back, when the child is above seven years old, upon the system of oral instruction and lip-reading, which consists in teaching the pupil to speak by imitation of the movements of the lips and tongue, modulation being secured by allowing him to feel with his fingers the vibrations of the teacher's larynx. For hearing is substituted observation of the speaker's lips.

According to Hartmann, a few pupils learn so successfully that a stranger does not notice any defect; one-third, though their speech is peculiar, can yet converse with any one; a second third can be understood by acquaintances alone, while the rest turn again to the language of signs.

ANTITOXIN.

The report recently issued to the American Pediatric Society on the antitoxin treatment of diphtheria in private practice is likely to have a distinct effect in increasing confidence in this method of treatment. The total number of cases included in the report was 5,794, of whom 7.3 died, a mortality of 12.3 per cent. But of these 218 were moribund before the treatment was begun, or died within twenty-four hours, and if these be excluded the mortality is reduced to 8.8 per cent. When first used after the third day of the disease the effect of the injections is comparatively slightly visible, and the earlier they are used the better is the result. When employed within the first three days the already mentioned general mortality of 8.8 is reduced to 4.8; yet even when used as late as the fifth or sixth day striking improvement has taken place in some cases.

In three cases the injection had the apparent effect of hastening or causing death. The first, a girl of sixteen, died ten minutes after the injection, in convulsions; in the second, a boy of two and a half years, renal symptom developed, and he died four days later of heart failure; and the third, a boy of three and a half years, died from acute nephritis, after a second injection, but the urine had not been examined before the treatment began.

In only nineteen cases injected reasonably early did the serum appear not to influence the progress of the case, and these were composed of cases in some way out of the ordinary on account of uncertain diagnosis, malignancy of type, etc. Of the 615 physicians from whom returns were received more than 600 spoke favorably of the serum treatment, and generally with enthusiasm. Complications were conspicuous by their comparative absence, the kidneys not appearing to suffer, and the lungs to suffer in much smaller proportion than in hospital cases. The heart appeared to be unfavorably affected on two or three occasions, but its action generally seemed to improve under the treatment.

It was recommended by the committee, which is appointed for another year, that the dose for children under two years of age and for mild cases over that age, should be 1,000 units, repeated if required, and for children over two years, in all laryngeal cases with stenosis, and in all severe cases 1,500 to 2,000 units, to be repeated in from eighteen to twenty-four hours if there be no improvement, a third dose being given if necessary at the expiration of a like time.

SUBSTITUTION IN PRESCRIPTIONS.

The complaint that druggists substitute one preparation or drug for another ordered by the physician is constantly reappearing. The reader can learn more of this by reading the article reproduced in "Medical Items Continued," p. x. No matter what the doctor orders, it is the business of the druggist to fill the prescription as written, unless it contains an error dangerous to life. Druggists show many favors to doctors, but some of them often take liberties with prescriptions.

TO NEW SUBSCRIBERS.

Any new subscriber ordering THE JOURNAL now will get it until January 1, 1898, for $2.00. If he pays the $2.00 January, 1897, he will get any premium offered new subscribers. If he doesn't want the premium he can pay the $2.00 after October 1, 1897.

THE American Microscopical Society will hold its nineteenth annual meeting in the new Carnegie Library Building, Pittsburg, Pa., Tuesday, Wednesday, Thursday, and Friday, August 18, 19, 20, 21, 1896. A hearty welcome will be extended to all interested in the microscopical sciences. Applications for membership and titles of papers to be read at the meeting should be addressed, to A. Clifford Mercer, M.D., President, Syracuse, N. Y., or to Wm. C. Krauss, M.D., Secretary, 382 Virginia street, Buffalo, N. Y.

A DEATH from chloroform is reported in Pensacola, Fla. Dr. J. H. Pierpont was administering the anesthetic, and some operation was being done by Dr. W. E. Anderson. Only a small quantity of chloroform had been used.

INFORMATION concerning various Medical Colleges, their teachers and programs, will be found on pages XXI to XXIX.

SELECTIONS AND ABSTRACTS.

SKIN DISEASES AND SYPHILIS.

EDITED BY DR. M. B. HUTCHINS.

THE VALUE AND LIMITS OF USEFULNESS OF ELECTROLYSIS IN DERMATOLOGY.

An interesting discussion of this subject was had at the 1895 meeting of The American Dermatological Association, as reported in the Transactions.

There was a little of the usual "Doctors disagree" difference of opinion, but the majority of the members, even while expressing themselves in terms of extra-conservatism, had much to say in its favor from their own experience. A summing up of the views expressed shows the balance in favor of electrolysis in many skin anomalies. Other methods were preferred by the speakers for various conditions amenable to electrolysis, but the position of usefulness of electrolysis seems, to the editor, unshaken.

It appears that those who speak and write upon the subject use too loose terms and that the operations as suggested are not described with sufficient regard for scientific accuracy.

No one should attempt the work without the means of regulating and measuring the current. The current in most cases, to avoid scarring, should be as weak as the requirements of the operation permit. The resistance or susceptibility of each patient must be considered. The work must be done properly, the anatomy, pathology and physical characteristics of the condition and locality being well in mind. The current advised or used should never be expressed in cells, but always in milliamperes. A needle insulated almost to its point is the proper one for growths requiring rather deep punctures. Though a rather tedious method, the ultimate cosmetic results in numerous conditions are such as can be obtained with no other method. That its chief use is in cosmetic operations is admitted, which should enhance rather than diminish its value.

AMERICAN DERMATOLOGICAL ASSOCIATION.

The meeting will be held at the Hot Springs of Virginia, September 8, 9, and 10, 1896. Everything will be done to make the meeting a success and several papers on interesting subjects have been already promised. Dr. White will open a general discussion on the subject, "What Effect do Diet and Alcohol have upon the Causation and Course of the Eczematous Affections and Psoriasis?" Charles W. Allen, No. 126 East Sixtieth Street, New York, Secretary. This is one of the most scientific bodies in America. It is composed of the majority of the leading dermatologists in the United States and Canada, and its papers and discussions are of great interest and value.

FOR severe urticaria give doses of twenty-four grains of salicylate of soda every two hours until three doses are taken.—*Ex.*

GENERAL MEDICINE AND THERAPEUTICS.

SLEEPLESSNESS.

It is unfortunate that the physiology of sleep is not better understood. It is even more unfortunate that what we do know about the phenomenon of sleep is not more diffused among the profession. How frequently indeed do we observe physicians who mistake unconsciousness for sleep, and who seemingly regard the goal of the application of their therapeutical measures as having been reached, when they have succeeded in rendering a tired, worn-out, nervous individual oblivious to his surroundings by placing him in a condition which they call sleep, but which is simply unconsciousness. An experience of several years in insane hospital practice presented to the writer, in a very strong light, the enormity of this error and its wide prevalence. It was no uncommon sight to see patients brought to the hospital in an unconscious state, due to the administration of narcotics; opium or morphine being the favorite drug used. One case is worthy of mention here, a male, neurasthenic, harmless, but suffering from the exaggerated mental symptoms, so marked in this disease, was accompanied by his physician to the hospital. The physician stated his reason for coming was, that he considered it important to keep his patient asleep, so that he would not appreciate the humiliation of entering the hospital, and further, that inasmuch as he had not been sleeping well for some time, and that he was now sleeping, he considered the opportunity a good one to let him recuperate. To this end, the physician was at intervals giving hypodermic injections of morphine, and the poor, worn-out, narcotized patient, saturated with morphine, and believed to be asleep, was, as best he could, with his worn-out nervous mechanism, fighting for his life, which his respiration, weak pulse, and inhibited reflexes showed was at very low ebb. This case was not an exceptional one; it was, alas, too common an experience. The physician had lost sight of the very essential principle which should govern our therapy in the treatment of sleeplessness, and that is, that sleep has for its object the repair of the wear and tear of vital processes of life, and to insure sleep we must not interfere with these processes, which we do when drugs are given until sedation results.

There is another thing to bear in mind in the consideration of sleeplessness, and that is, that there is a source of irritation somewhere in the economy, which, if relieved, will be followed by sleep. Again, "an axiom" well worth remembering is, that the more gentle the means employed to induce sleep, the more natural will be the sleep induced, and the more gentle the means employed, the more careful must we be to select the right time for their use. We believe that Dujardin-Beaumetz was right when speaking of the use of drugs in the treatment of sleeplessness; he said: "That for a drug to be hypnotic, it must imitate the natural condition of sleep, by effecting a lowered intracranial pressure, and that drugs which, though bringing about unconsciousness do not lower cerebral pressure, or which increase it, cannot claim to be hypnotics. Opium and morphine are objectionable on this ground. Drug treatment must put the patient in a position to go to sleep in a natural way, and not *put* him to sleep." Sedatives do this, but narcotics do not.

In the use of sedatives we must be cautious and not use them *ad libitum*. The writer, in a paper on "Sedatives in the Treatment of Insanity" (1892, *Hospital Bulletin of Minnesota*), said: "Each case is a 'law unto itself,' and as such requires patient and persistent study ere we commit the folly of giving a hypnotic, when more simple and efficacious methods would produce satisfactory results." You cannot cure sleeplessness by drug treatment; the drugs simply conserve nervous energy and act as valuable assistants to the building-up process, necessary to cure the sleeplessness. Sedatives act, as before stated, by placing the patient in a position to go to sleep, and nature does the rest.

In our experience we have learned to rely upon the bromides, chloral, cannabis indica, and hyoscyamus as sedatives, which, if judiciously used, bring order out of chaos. The bromides lower the sensibility of the brain, and thus promote sleep. The single salts can be used, but in the writer's experience, where a sedative is indicated in sleeplessness, it is better to combine them, and when there is any excitement, add chloral. Cannabis indica is a sedative which is but little used by the general practitioner, and for the reason that it is misunderstood, misrepresented, and as a result never used as it should be. Clouston, Mathison, and Echeverria have taught us their value. Hyoscyamus is another sedative, the value of which is not appreciated, a drug which is indorsed by Budde, Brush, Krafft-Ebing as a hypnotic. Now, these valuable sedatives, when combined, give us a thoroughly reliable and satisfactory agent with which to treat sleeplessness, and in the writer's experience no more elegant or reliable preparation is before the profession than that of bromidia, in which is combined in proper proportion, the bromide of potassium, chloral hydrate, hyoscyamus and cannabis indica. We feel that the profession can always rely upon this combination, and find it especially useful in the treatment of sleeplessness.—*The Medical Fortnightly*.

GUAIACUM IN GOUT AND RHEUMATISM.

At the Royal Medical and Chirurgical Society, on May 26th, Sir Alfred Garrod, after speaking of numerous observations carried on for very many years among both hospital and private patients with guaiacum, both in the form of a powder and as ammoniated tincture of guaiacum, thought he had been successful in establishing the following points in regard to the action of guaiacum: (1) Guaiacum is innocuous, and may be taken for an indefinite period of time, and looked upon as a condiment rather than a drug —as harmless as ginger or any other condiment. (2) Guaiacum possesses a considerable power (but less than colchicum) in directly relieving patients suffering from gouty inflammation of any part; it may be given whenever there is but little fever. (3) Guaiacum taken in the intervals of gouty attacks has a considerable power of averting their recurrence; in fact, it is a very powerful prophylactic. (4) Guaiacum does not appear to lose its prophylactic power by long-continued use. (5) There are a few persons who cannot readily continue the use of guaiacum; for such cases there are other drugs whose action as prophylactics is in some repects similar; perhaps serpentary is one of the most powerful of these. The author gave a short account of serpentary, and mentioned the fact that he had given it successfully in gouty inflammation in the elderly subject; as a prophylactic he had less personal experience, but he did not doubt that it was possessed of considerable power. Before attempting to explain the mode of action of guaiacum in the treatment of gout, he gave his view of the origin of uric acid in the animal economy; instead of supposing that it was formed in the system by the metabolism of the nitrogenized tissues and then thrown out by the kidneys, he was of opinion that it was produced from urea and other nitrogenized bodies in the blood by the direct action of the kidneys, and that when uric acid was contained in the blood, this arose from the absorption from the kidney structures of the urate of ammonium, depending on the want of sufficient throwing-off powers from these tissues. The author was aware that it was from his own discovery of uric acid in the blood that the opposite view of the formation of uric acid arose. To explain the prophylactic action of guaiacum the author did not think that it affected the formation of uric acid, but that it acted directly on the kidney itself as a stimulant, and enabled it to get rid of any accumulation in the tubules, and thus prevent absorption from them into the blood. In confirmation of this view it was found that patients, when taking guaiacum, often had unusual deposits of urates in their urine. The paper closed with the following remarks: "If the statements contained in this communication have the effect of inducing my medical brethren to direct their attention to the value of guaiacum in the treatment and prevention of gout, I feel I shall have conferred some benefit on the profession and through them on the public at large."

Sir A. Garrod was quite certain that urate of sodium was to be found in every gouty joint. He quite agreed that guaiacum was useful in chronic rheumatism, especially in muscular affections. From an examination of the late Dr. Seymour's cases, made many years ago, he was certain that some described as acute rheumatism and relieved by guaiacum were in reality gouty. Healthy skin never allowed uric acid to pass through in sweating; he had examined as much as ten ounces of sweat, and had never found any uric acid. Uric acid could, of course, be obtained from the fluid of a blister. —*Brit. Med. Jour.*, May 30, '96.

MISCELLANEOUS.

CHRONIC GASTRITIS OF LONG STANDING, WITH PERIODIC ATTACKS OF MIGRAINE.

The herewith reported case is one of double interest, inasmuch as the patient has been under my care for a number of years, and previous to the commencement of the present treatment, I have been unsuccessful in affording much relief or preventing the recurrence of the frequent and periodic attacks of migraine, to which she had been more or less subject to since early womanhood. The cause of which I could not account for more than a "habit long continued," aggravated by gastric catarrh.

The history of the case is briefly as follows: Mrs. A., age 55, since early womanhood has been subject to periodic attacks of migraine at intervals of two, three, or four weeks, but seldom free from them for longer intervals.

An attack comes on by general malaise of usually a day's duration, repugnance of food or drink, marked drowsiness, much depression with request for rest and quiet, followed by complete physical prostration, dull frontal headache, which the least noise or disturbance makes the more intense, invariably accompanied by violent and frequent attacks of vomiting and retching, inability to retain any food or nourishment of any kind, retention of bowels, often cold sweats, pulse somewhat slow and weak and small in volume. This condition lasting usually two days, followed by gradual cessation of symptoms.

During the whole period of usually four or five days' duration, she is unable to take nourishment of any kind, remains constantly in bed, and desires only complete rest and quiet. The previous treatment has been so varied and on so many different plans, that I refrain from mentioning them.

Two years ago I was able to prevent an attack for over two months by the use of strychnine in 1-20 grain doses t. i. d. with careful diet and artificial digestive.

In May, 1895, I put her on Charles Marchand's "glycozone" in teaspoonful doses well diluted t. i. d., using this as all other previous remedies experimentally. She commenced to improve much in general health, an unsually good appetite, without the previous distressing symptoms following, a more regular movement of the bowels, freedom from headache, and in every way a decided improvement. This improvement and enjoyment of good health lasted during continuation of above treatment for over three months. Unknown to me she stopped taking the glycozone, thinking herself perfectly well. In a few weeks had a return attack, milder and devoid of gastric distress. A similar attack two months later, both of which occurred some weeks after stopping the above described treatment, and I might say caused by imprudence in diet.

The conclusion come to in this case is, that the headache is sympathetic, that the stomach becomes acutely inflamed by its inability to naturally and properly perform its functions, and responds to the call of nature to unload itself, and thus secure for a time rest, that the use of glycozone has corrected the existing gastritis, and by so doing has removed the primary cause of these many years of suffering.—*Report of a Case by Geo. A. Curriden, M.D., Chambersburg, Pa., published by the Medical Summary of Philadelphia, Pa., March,* 1896.

MEDICAL ITEMS.

Dr. J. B. S. Holmes has been appointed a member of the State Medical Examining Board by the Governor, to succeed Dr. J. C. Olmsted, resigned.

Dr. L. B. Grandy is spending several months in the schools of New York fitting himself for special practice in diseases of the Eye, Ear, Nose, and Throat. He will return to Atlanta some time in the fall.

At the last meeting of the Anatomical Board of Georgia, Dr. Wm. Perrin Nicolson was elected President. Upon the resignation of Dr. L. B. Grandy, Secretary and Treasurer, Dr. J. L. Campbell was elected to fill this position.

Dr. Caverhill, medical officer of health, Haddingtonshire County Council, found that by the use of Pasteur filters, giving 1,000 gallons per day of sterilized water in connection with certain wells in the county, he was apparently able to limit the spread of typhoid fever in the district. During an epidemic none of the persons using such water were attacked.

Ammonol, so the manufacturerers and proprietors say, is "Ammoniated Phenylacetamide ($C_6H_5NH_2$)." Dr. R. G. Eccles (*Druggists' Circular*, May, 1896) has called attention to the fact that this chemical name is only a subterfuge on the part of the proprietors. Phenylacetamide is only another name for acetanilid, and the formula $C_6H_5NH_2$ is really that of an anilin oil. Dr. Eccles says that all the medicinal results from ammonol may be got from a mixture of six parts acetinalid, three parts sodium bicarbonate, and one and a half parts ammonium carbonate. The yellowish tinge is obtained from the addition of a little methyl orange and curcumin.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION—MEETING AT ST. PAUL, MINN.—We desire to draw the attention of our readers to the fact that the meeting of this society has been changed to September 15, 16, 17, 18, and that plans are being formed, if 100 members can be got together, to have a trip to the Yellowstone Park. Particulars will be supplied by Dr. C. A. Wheaton, St. Paul, Minn.

THE following is the announcement of the new *Western Medical Review:* A medical journal for the progressive physician. A Western medical monthly magazine for the Western doctor. First-class, clean, and in every way up to date. Nothing cheap about it but the price. That is only two dollars per year. We claim quality and not quantity, but for all that the *Western Medical Review* will contain more original reading matter than any other first-class two-dollar medical journal published. It is a paper for you to patronize, and we want your patronage. Can we have it? Address WESTERN MEDICAL REVIEW, Lincoln, Neb.

DR. JOSEPH WEATHESSLY, of Waco, Miss., sends us the results of his experience in the treatment of typhoid fever in the last forty years. In a recent epidemic he treated sixty-three cases, with a mortality of three, and these died from causes unconnected with the fever. For constipation he uses sulphate of magnesia; chlorate of potash "for the soreness and ulceration of the bowels," with ten drops of spirits of turpentine; the patient is sponged with lukewarm water every six hours for the fever. For rest he prefers the sulphate of morphia "*ad libitum*" (though most physicians will question the wisdom of this step); nux vomica for delirium; he has also lately used arsenite of potash.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION.—A meeting of the Executive Committee of the Mississippi Valley Medical Association was held at Atlanta on May 6th, and the following gentlemen were appointed to deliver addresses: Dr. H. N. Moyer, Chicago, Address on Medicine; Dr. Horace H. Grant, Louisville, Address on Surgery. The indications are that the meeting to be held at St. Paul, on October 20, 21, 22, and 23, will be the largest and most successful in the history of the Association. As all the railroads will offer reduced rates for the round trip, an opportunity will be given to visit St. Paul and Minnesota during the most delightful season of the year. H. O. Walker, M.D., Detroit, Mich., President; C. A. Wheaton, M.D., St. Paul, Minn., Chairman Committee of Arrangements; H. W. Loeb, M.D., 3559 Olive street, St. Louis, Secretary.

"THE LARYNGOSCOPE."—We have received the first number of this new monthly journal, devoted to diseases of nose, throat, and ear, and intended "to fill the niche between the strictly special and the general journals with that class of physicians who confine themselves entirely to the treatment of the diseases mentioned, or who pay special attention to these troubles while maintaining a general practice." The editors are Drs. Frank Y. Rumbold and M. A. Goldstein, St. Louis, and the associate editors are Drs. Lederman, New York; Scheppegrell, New Orleans; Bishop, Chicago; Eaton, San José, Cal.; while the journal is fortunate enough to have for its list of foreign editors, Drs. Durdas Grant, London; Kirk Duncannon, Edinburgh; Kimaru, Tokio; Urbantschitsch, Vienna; Hartmann, Berlin; and Sterling Ryerson, Toronto. The subscription is $2.00 a year. If this journal continues as it has begun, we venture to prophecy for it a successful career.

THE following experience of Slatin Pasha, recorded in his "Fire and Sword in the Sudan," p. 70, should help to reconcile patients to the comparatively mild unpleasantnesses of more civilized professors of the healing art: "Without a moment's hesitation the doctor placed his hand on my head, pressed my temple with his thumb and forefinger, and, muttering a few words I could not understand, to my horror spat in my face. In a moment I had jumped up and knocked him down; but Ahmed, who was standing by leaning on his crutch, begged me not to take it in this way. 'It was not really meant for rudeness,' he said; 'it is merely a part of the cure, and will do you much good.' But the poor doctor, whose confidence had been somewhat shaken and was still standing at a distance, muttered, 'Headache is the work of the devil, and I must drive it out; several passages from the Koran and the sayings of holy men direct that it should be chased away by spitting, and thus his evil work in your head will cease!'"

WE heartily commend the following abstract from a paper read by Professor J. Bradford McConnell before the Montreal Medico-Chirurgical Society, May 29, 1896, and published in the *Canada Medical Record.* Too much care cannot be observed in the protection of milk supplies from the time the milk leaves the cow until its use, which we think should, specially in the case of children, always be in the cooked state.

The adoption of a minimum standard would result in the sale of a very large quantity of adulterated milk, which, apart from diminishing the nutritive value of the milk—a matter of great importance in infant-feeding—is often the immediate cause of transmitting disease germs by the addition of infected water. In the opinion of the writers all this can be prevented and milk of uniform standard can be obtained by encouraging the establishment of milk depots like the Walker-Gordon laboratory of Boston. In the management of this establishment farm and herd are under the absolute control of the laboratory, and are used for laboratory purposes only; the cows, their food, their stables, their pasture, and their drinking water are subjected to the frequent, paid, critical examination of the best veterinary surgeon that can be procured in Boston. The dairymen dress in white suits before milking, each having previously had a bath. The cows are milked into glass pails, and the milk, after being aerated and cooled to about 44 degrees Fahrenheit in a tank of ice and water, is delivered at the laboratory in Boston within four hours of the milking.

At the laboratory a ventilating engine keeps up a constant change of air, and a hose keeps the enameled brick walls and stone floors wet to prevent any remaining dust from contaminating the milk while it is being "modified." The whole milk, after being "Pasteurized," passes through a Stockholm separator which makes sixty-eight hundred revolutions a minute, yielding a cream of an almost constant 16 per cent. fat. It not only does this, but it removes all dirt that from unavoidable causes has gained access to the milk, thus yielding a clean, skimmed milk, practically free from fat (only 0.18 per cent. remaining).

BOOK REVIEWS.

A TEXT-BOOK OF BACTERIOLOGY. By George M. Sternberg, M.D., LL.D., Surgeon-General U. S. Army, etc., etc. Illustratrated by heliotype and dermo-lithographic plates and 200 engravings. Price, $5.50. New York. William Wood & Co.

For the benefit of students of medicine and others who do not care especially for the detailed descriptions of non-pathogenic bacteria and the extensive bibliography contained in the manual by the same author published in 1892, this text-book has been prepared. It comprises that portion of the manual which is printed in large type, revised to include all important additions to our knowledge of the pathogenic bacteria since the original date of publication.

This text-book of some 700 pages is divided into four parts, the first dealing with classification, morphology and general bacteriology; the second with general biological characters; the third with pathogenic bacteria; and the fourth with saprophytes.

These subjects are dealt with fully and in an interesting and readable manner, while Sternberg's reputation as a bacteriologist is sufficient evidence for the trustworthy nature of this work, which constitutes a book which makes an important addition to the best of America's scientific literature. There is much here described which would be read with benefit by the ordinary busy practitioner; and the book is to be commended to the attention of all who, even without desiring to pose as bacteriologists, yet wish to know something of the life-history of those germs which play such an extremely important rôle in modern pathology, of the method by which they are connected with the diseases which they are believed to produce, and in that way to learn as far as possible what are the present prospects of the physician's ability to destroy them within the human body.

The printing and illustrations are excellent, and do credit to the already high reputation of the publishers.

THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE RECTUM. Being a Practical Treatise on Fistula, Piles, Fissure and Painful Ulcer, Procidentia, Polypus, Stricture, Cancer, etc. By Wm. Allingham, F.R.C.S., Eng., Herbert W. Allingham, F.R.C.S., Eng. Sixth edition. pp. 476. New York, Wm. Wood & Co.

This book needs no words of commendation. It has reached the sixth edition, in which have been made such alterations and additions as seemed advisable in order to bring it up to date. The authors' names are sufficient evidence of the value of the book, for no surgeon has gained a higher reputation in the treatment of the class of diseases with which it deals. We would draw special attention to the section on cancer of the rectum, and especially to the discussion on the advisability of operation. After having during the last ten years seen 850 of these cases, having performed excision 75 times and colotomy 138 times, the authors conclude that if the patient's age does not exceed forty-five years, very little is to be gained by excision, while colotomy seems to prolong life for an extremely short time, and palliative treatment is the right course to pursue. Between the age of forty-five and sixty excision should be attempted when the growth is well in the lower part of the rectum. For patients above sixty excision is extremely favorable in suitable cases. The book is well written and no mistake will be made in recommending it. Marginal notes are used, which greatly facilitate reference. It is well illustrated and beautifully printed.

GUIDE MÉDICAL PARISIEN. Published by the "Indépendence, Médicale. pp. 290. Price, 3 fr. 50. A. Malone, Editor, 21 Place de l' école-de-Médecine.

This little book will fill a distinct want felt by all who visit Paris with the intention of seeing the working of its numerous hospitals and cliniques. Each of these receives a short historical description; the names of the various physicians and surgeons, with their chief of staff, the hours of attendance, nature of the work done, with all necessary details, are given.

We notice in the ophthalmic section the absence of the name of Landolt—surely a serious omission, seeing that this celebrated surgeon is one of those visited most frequently and with most result by foreigners. The book deserves, and will no doubt receive, ready sale among native and foreign doctors.

THE MULTUM IN PARVO REFERENCE AND DOSE BOOK. By C. Henri Leonard, M.A., M.D., Professor of the Medical and Surgical Diseases of Women, Detroit College of Medicine. Flexible leather, 143 pages, price 75 cents. Detroit. 1896: The Illustrated Medical Journal Company, Publishers.

This is a recent edition of the Dose Book, of which the title page informs us some forty thousand copies have been issued. The present edition is printed on very thin paper, and is bound in red leather, round corners, so as to make it specially light and handy for the pocket; the weight is not two and a half ounces. Besides the doses of some 3,500 preparations being given, it has numerous tables, such as the solubility of chemicals, pronunciation of medical proper names, poisons and their antidotes, incompatibles, tests for urinary deposits, abbreviations, table of fees, etc. It will be found a handy pocket companion.

TRANSACTIONS OF THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Vol. VIII. Eighth Session, Held at Washington, D. C., Novemver 12, 13, 14, 1895.

We have received a copy of this book, which contains a list of officers, members, the by-laws, with the various addresses and papers read at the meeting. It is well bound and printed.

THE fiftieth anniversary number of the *Scientific American*, New York, just out, is a really handsome and valuable publication of 72 pages. It reviews the progress of the past fifty years in the various sciences and industrial arts; and the various articles by the best scientific writers of the day are racily written and richly illustrated. The editors have accomplished the difficult task of presenting a compendium of information that shall be at once historical, technical, and popular. The interest never flags for a moment, and the story of the half-century's growth is in itself a veritable compendium of valuable scientific information for future reference. Price, 10 cents per copy.

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ORIGINAL COMMUNICATIONS.

A FURTHER CONTRIBUTION TO THE USE OF THE GALVANO-CAUTERY IN PTERYGIUM OPERATIONS.*

BY ARTHUR G. HOBBS, M.D.,
ATLANTA, GA.

Since presenting my first paper (The Treatment of Pterygia with the Galvano-Cautery) before the American Medical Association in San Francisco, two years ago, I have employed the cautery twenty-one times in pterygium proper, and twelve times in pinguecula, its usual antecedent. In my earlier contributions to this subject I pointed out that the principal object to be obtained by a pterygium operation is to prevent two raw surfaces from remaining in apposition after the operation, which necessarily results in the relapses that we too frequently see.

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*Read before the Ophthalmological Section of the American Medical Association in Atlanta, May, 1896.

Why not then convert each of the raw surfaces into an eschar at once to avoid such failures, provided we are able to demonstrate practically that we can bring about that desired result?

For some years the galvano-cautery point has been resorted to in corneal ulcers, particularly in those indolent and intractable ulcers which refuse to yield to other methods of treatment. It was suggested to me a few years ago, after seeing some of the beautiful results of the cautery when applied to ulcers of the cornea, that it could, at least, produce no bad results if properly applied to the neck of a pterygium for the purpose of cutting off the nutrition of its corneal apex. I hoped it would prove a better means of severing the arterial supply to the apex as it crossed the sclero-corneal junction. This object is generally attained by the use of the knife, and various other methods have also been resorted to. The failures in pterygium operations are usually due to the re-establishment of the arterial circulation, and when this occurs the desired end of the operation fails in proportion to the re-established vessels.

The great vascularity of a pterygium, with its vessels crossing over the sclero-corneal line to supply its apex, renders it difficult to sever all the arteries by a clean cut with the knife; hence the many knife and scissors operations that have been resorted to by different operators to accomplish this end.

Each surgeon aims at one end primarily, and that is to cut off all the blood supply from the corneal apex; and secondarily, to destroy as little conjunctiva as possible. When the first end is attained, the corneal part of the pterygium has lost its direct nutrition and then depends upon the cornea proper for its sustenance; and as this meager supply proves insufficient, atrophy results and the partial, or almost complete, obliteration after a time will depend upon the activity of the absorbents. For this reason the best results are obtained in younger subjects in which, as a rule, the lymphatics are more active, as is also the contractility of the arterial coats.

In many cases when the knife is resorted to, a secondary pterygium results, in which case sufficient nutrition is supplied to the apex to perpetuate the corneal haziness even beyond its apparent margin and to greatly interfere with vision.

When the cautery section is well made I have not seen these secondary results that are often so difficult to prevent by a clean cut with the knife and scissors. In some cases, however, it may be best to combine the methods of operating, as I have done in two cases not included in this report. These two pterygia were extremely vascular and thick, hence I first used the knife in the usual way and then seared the divided edges with the cautery blade to prevent the secondary results.

The fine-pointed cautery blade, heated with a battery that can be perfectly gauged and always relied on, is applied horizontally to the narrowest portion of the growth which is near the sclero-corneal line; the application is made just before white heat is reached, and should be quickly applied and reapplied, if the tissues are not at first completely severed. If the growth is not adherent to the scleral and corneal margin, it is best to grasp it with small forceps and raise it from the sclera. When the forceps are thus used it is easier to be certain that the cautery has made complete section of all the hypertrophied conjunctival tissue.

When the corneal head is large and protruding it is advisable to make a cautery application in the same manner as in applying to a corneal ulcer. In both cases the resulting cicatrix is less—it is more transparent. This is not altogether an unknown fact, but one that has seemed never to have been brought out as prominently as its importance would suggest. For this reason one may be tempted often to resort to the cautery to reduce a large pterygium apex or a corneal ulcer, for the purpose alone of attaining this corneal transparency. The resulting eschar completely severs the vascular connection, leaving no raw surfaces in apposition, so that a re-established circulation is practically impossible; this cannot always be attained when the knife or scissors have been used.

I would have resorted to this method more frequently but for that decided objection to the cautery which we so constantly encounter, but are bound to respect. To recapitulate: The operation is quickly performed; it is followed by no bleeding; it leaves no ecchymosis; the wounds heal rapidly; there is very little pain during and after the performance; it requires no bandages and the eventual corneal haziness around the apex is slight. A weak solution of cocaine (2 per cent.) is first dropped into the conjunctival sac, then after about five minutes a stronger solution (about 10 per cent.) is applied at intervals, locally, by means of a small cotton probe, for five minutes more; in the meantime the lids are held open. By this means the toxic effects are avoided except in those subjects that are unusually susceptible to cocaine. In using cocaine, in this latter strength, I try to avoid as much as possible, by the position of the patient, its contact with the cornea. It is now a well-known fact that long-continued applications of this drug, even in weak solutions, are disastrous to an abraded cornea.

During the past two years I am inclined to restrict the use of the cautery to cases with narrow necks, those that can be raised with fine tooth forceps, and preferably to such of these as admit of a broad curved needle being introduced beneath the narrow neck at the sclero-corneal junction as it is lifted from the sclera with the forceps. One or two quick touches with the cautery knife severs the fibrous tissue down to the needle, leaving both ends seared. This procedure at the same time prevents adhesion by first intention and causes a retraction in both directions. One perpendicular stitch, to fill the conjunctival gap and the operation is complete unless it be advisable to touch the corneal apex with the cherry red point. An antiseptic dressing with vaseline and the head bound with a single round of bandage if desired suffices to lessen the friction of the lids upon the wound and to comfort during the healing process.

In three cases of double pterygia I applied the cautery on one side and made a cutting operation on the companion eye. The results, in each instance, were in favor of the cautery, that is to say, the latter method was more quickly done and with less pain, while the healing process was shorter, and the cornea (the most important consideration of all) was left with considerably less opacity than when the cutting operations were employed.

Another consideration not to be lost sight of is that should a second operation be necessary, the patient is more likely to consent to it, when the quickly performed and almost painless cauterization has been previously used than when the knife has been resorted to.

SEPT. 1.—Since the above was written I have used a broad, blunt needle, grooved on its concave as a safeguard, by first insinuating it through a small slit in the conjunctiva between the sclera and the narrow neck close to the cornea. The cautery blade then cuts through the fold down to the groove. This is at least a safer means for beginners, and I now think it is best, when the first step is practicable, as it is not if the neck is broad and adherent to the sclera.]

REMARKS ON THE TECHNIQUE OF EXTERNAL URETHROTOMY.

BY W. S. GOLDSMITH, M.D., ATLANTA, GA.
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To my mind there is not in the whole range of surgery an operation, if intelligently executed, fraught with better results and comfort to the patient, than an external urethrotomy. At the same time, it is an operation that is regarded as dangerous, difficult, and, I regret to say, advised as unnecessary by men who are themselves capable of doing good work in this line. For this reason I am constrained to contribute a few suggestions which I am sure are sound, plain, and practicable. It is not within the province of this paper to discuss the various varieties of stricture, their etiology or pathology, and I shall confine myself to the elucidation of the different steps of the operation, together with brief references to the appliances necessary to its successful accomplishment.

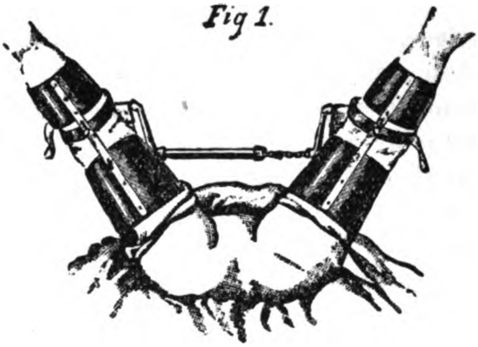
I have seen within the past few years a number of cases illustrating the most careless and barbarous use of instruments, during a course of treatment for the correction of some constriction in the urethra. This fact leads me to assert that no man is justified in doing this operation, or any other for that matter, in the genito-urinary tract, who does not practice the most extreme delicacy of touch and gentleness in the manipulation of any urethral instrument, be it either the softest rubber catheter or largest steel sound. The physician guilty of such indiscretion, and I rather suspect there are quite a number in the profession, should not dare to jeopardize the life of a man by ignorantly and blindly "rushing in where angels fear to tread." We are told by eminent surgeons and gynecologists of the fearful slaughter of the innocents perpetrated by the mushroom abdominal surgeon and pseudo-gynecologist, but not one note of warning has emanated advising us of the bad results at the hands of tinkering stricture doctors.

What surgeon has not heard the oft-repeated story of the patient having an impermeable stricture, or one with false passages, ascribe his condition to the physician whom he first consulted. The days of rough-and-ready grand-stand surgery are numbered in the past, and to-day the physician who is lacking in the many little refinements of manipulation is relegated to the class to which he belongs.

The inability to introduce a guide is one of the principal objections urged against this operation, and we all agree that it is a matter of much tediousness to locate the urethra without this valuable aid. With a grooved staff in place, it is a comparatively easy matter to cut down on it, and rapidly complete our work. But I contend that with the expenditure of more time and nicety of dissection, and with a good, long incision through the bulb, down on the point of the sound, little difficulty should be experienced in accomplishing the end in view. The profuse hemorrhage following the division of the artery of the bulb is the objection to a long anterior incision, but this can largely be obviated by carefully ligating such bleeding points as may be necessary to procure an unobstructed operating area. If we fail to introduce a guide, even one or more filiforms in a well oiled urethra, when the patient is in the prone position and muscular relaxation is complete, it is useless to continue our efforts in this direction when he is in the lithotomy position, and every structure of the perineum is tense and unyielding, the tract of the urethra changed, and other familiar landmarks obliterated. This brings to mind an operation I witnessed some time ago, at which three surgeons of some note overlooked the necessity of introducing a guide until the patient was in position for operation. I was astonished at the persistency with which all manner of hard and soft instruments were pushed and punched in that man's urethra without success. Such faulty technique was absolutely uncalled for, and was productive of free hemorrhage and undoubted contusion and laceration of the urethral wall.

The preparation of the patient varies according to the length of time he has been affected, and the condition of the bladder and kidneys. A thorough examination of the urine is made, and any abnormal condition corrected as far as possible. In strictures where the lumen is so small as to preclude a steady stream, not much can be done, except in a general way, until thorough drainage is effected subsequent to the operation. As a routine practice, however, I administer quinine and salol, five grains each, every six hours, for twenty-four or thirty-six hours preceding operation, and in conjunction advise the use of a good lithia water, preferably the Bowden Lithia, on account of its palatability and the ease with which patients imbibe a quantity, without feeling any untoward effect. The usual salines are given the night before, and all hair is shaved from the pubis, perineum, nates, and half way down the thighs. A good, strong dining or kitchen table, well padded with a couple of blankets and a sheet, makes as good operating table as one could desire. A large size Kelly's pad, two fountain syringes, or, what is better, glass irrigators with nicely adjusted caps, for bichloride and salt solutions, should be placed at a convenient distance from the table, and lastly as few instruments as possible, properly sterilized, arranged in vessels near at hand. The usual grooved staffs, hard and soft rubber and steel sounds, scalpels, straight, blunt-point bistoury, artery forceps, grooved director, steel probes, needle-holder, half-dozen small half-curved needles threaded with the smallest plaited white silk, urethretome, and different sizes of rubber catheters for flushing urethra and a large one for the perineal wound. I also have at hand five or six feet of black rubber tubing, with a section of glass tubing fitted in each end, one of which connects with the perineal tube, while the other projects through a clean cork into a two-quart white glass bottle, which is the receptacle for the urine. This bottle is kept out of the way under the bed and its contents measured once in twenty-four hours, and a memoranda of the same kept during the period of convalescence. Two assistants are necessary, exclusive of the administrator of the anesthetic, while a third could be utilized to advantage. The two supporting the legs of the patient should have their duties clearly outlined, the one on the operator's right being familiar with the use of all the urethral instruments, and fully appreciating the importance of the absolutely correct position the staff should assume, while the other sponges and looks after the knives, forceps, needles, and ligatures. The accuracy and steadiness with which the patient is maintained in position is of prime importance, and this precaution should be insisted on until the wound is finally dressed. The very best apparatus for this purpose is a modification of Clover's crutch, so ingeniously made by Dr. F. Tilden Brown, Presbyterian Hospital, New York. I consider this part of the technique so important, and this crutch such an excellent one, that I take the liberty of reproducing here-

Fig 1.



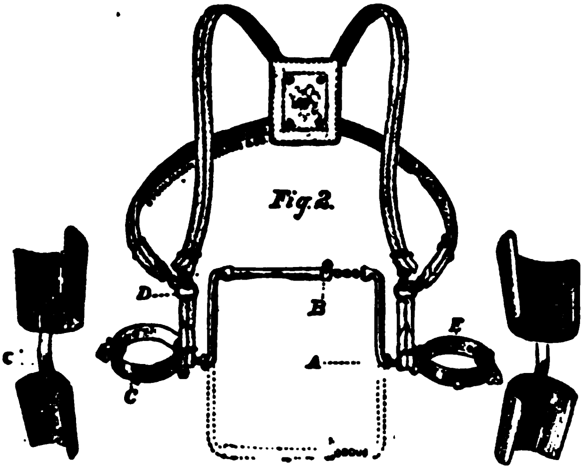


Fig. 2.

with, at length, Dr. Brown's description of this admirable appliance, together with cuts, for the use of which I thank Messrs. Tieman & Co., New York.

". . . . The main faults in the Clover crutch are the straight bar and neck-strap. The former seriously invades the operative territory. In urethrotomy it is near enough to the penis to encroach upon some part of the arc which the handle of a sound or grooved staff must traverse to enter or leave the urethra. It invariably causes the operator to use undue force and a false lateral position to crowd the handle of the instrument under the bar. In operations upon the rectum, perineum, or vagina this straight bar hung with sterilized cloths shuts off light from the field of operation, and fills the space convenient for instruments. The single neck-strap is faulty in that it exerts a considerable pressure upon the vessels and nerves of the neck, the deleterious effects of which are clearly marked in the congested state of the head, and the unsatisfactory respiration during anesthesia. These phenomena are particularly noticeable when the patient is flabby, plethoric, or alcoholic—that is, intensifies the dangers incidental to the anesthetic state commonly noticed in just such cases. To obviate these objections to the old apparatus, an extension bar, with right-angled elbows, continued into parallel arms, six inches long, has been substituted. These arms swivel in the collar of the metal leg-crutch. By this means the extension-bar can be turned well out of the way. It is ordinarily kept flat upon the patient's abdomen. The former thumb screw on the extension bar has been replaced by a spring catch, which, in spreading the thighs to the desired degree, is automatic, and maintains the position, the spring needing only to be pressed upon when the thighs are again to be abducted. Instead of a single neck-strap with two buckles as used in the original Clover, counter extension is effected by both neck and side-straps, radiating from a back pad. When the thighs are once flexed, all of the traction should be maintained by the two side straps, no pressure at all being exerted upon the supraclavicular region by the neck-strap.

" . . . . The drooping downward and inward of the feet is also troublesome; for while the knees are bent, the more the thighs are abducted, the greater the approximation of the feet. In the hospital amphitheater, where it is particularly desirable to afford a large visual angle of the operative field, this encroachment of the feet and lower legs is quite annoying. To avoid this extreme knee flexion must be prevented, and the leg rests, which button on to the leg-crutches, are introduced to obviate it. These leg-rests are made of light metal, coupled by a slightly-angled strong steel brace. These permit the natural knee flexion necessary when the thighs are also flexed."

In the absence of a crutch I have secured fixation of the legs in flexed position by firmly tying the hands and ankles of the patient, but it requires the constant attention of both assistants to hold the legs abducted to a degree necessary to keep the anatomical landmarks in a position by which there will occur no deviation of the urethral tract from the median line. Again, the use of this crude arrangement curtails the field of operation to such an extent as to obstruct the light, and render uncomfortable and awkward the movements of the operator. The original incision should be below the bulbous portion of the urethra, and in ordinary cases it will, with careful dissection, suffice. If, however, this particular surface of the perineum is short, and the urethra pushed backwards and deflects from the normal course, we are then justified in extending the incision upward through the bulb. The most difficult part of this operation, when done without a guide, is distinguishing the urethra from the surrounding structures. When it is located, and here great care must be exercised, we may cut directly down on stricture tissue. A steel probe or hard rubber sound of small size should be frequently used, both anteriorly and posteriorly, in the endeavor to locate the free opening of the urethra, and in a moderately dry wound the mucous membrane can easily be distinguished by its gray and shining appearance. When this is found, and after the constrictions have been severed, I carefully dilate the posterior portion of the canal with large sounds, and try to introduce my finger into the bladder. There are nearly always one or more bands anterior to the perineal wound, which are incised with the urethretome to a size sufficient to admit the sound I think is indicated in the after-treatment. In my experience the cicatrix following an extensive incision in the urethra rapidly disappears when the functions of the canal are restored and proper instrumentation inaugurated. The canal is irrigated with a warm 1 to 5000 bichloride solution and cleared of all blood-clots, and the bladder thoroughly washed out with warm salt solution. The perineal tube for bladder drainage is of large size and has three or four holes in the distal end, thus insuring perfect drainage and obviating the otherwise frequent necessity of withdrawing it to be cleansed. This tube is fastened in place by a smooth, sterilized, nickel-plated safety-pin, which catches up the skin at the margin of the incision, and barely pierces the lumen of the tube. A ligature used for the same purpose should provoke more objections than this method. Other appliances are never reliable, since their intricate mechanical construction is such as to invite sepsis, discomfort to the patient, and aggravation to the medical attendant. Narrow strips of iodoform gauze are packed in and around the wound, then bichloride gauze and cotton, and over all a T bandage applied, through which the tube finds its exit. The bladder and urethra should be irrigated the next and each succeeding day for a week with warm 1 to 6000 permanganate of potash solution. I do not introduce instruments into the penile portion of the urethra, except through the meatus, in the event of its section, until the drainage-tube is removed. This latter can be withdrawn, usually on the fifth or sixth day, if favorable progress warrants. For lubricating purposes I use sterilized sweet oil at the time of operation and subsequently, and if the urethra is very sensitive, and much pain experienced during instrumentation, two per cent. cocaine is added to the oil. I think it unwise to introduce the sound to the deep urethra oftener than every four days, and then the bladder should be approached by degrees carrying the instrument deeper and deeper at each séance.

27–28 *Grant Building.*

GUAIACOL FOR TUBERCULOUS IRITIS.

Dr. Vignes (*Bulletin Méd.*, April 22, 1896,) had under his care a case of tuberculous iritis, which the usual treatment did not relieve. The treatment consisted of administration of mydriatics, paracentesis, hydrargyrum, salicylates, revulsion, etc. He then had recourse to oily injections (1:15) of guaiacol, and the result was remarkable; the most rapid improvement following.

A FEW POINTS IN THE TREATMENT OF MORPHINISM.

BY C. C. STOCKARD, M.D.,

ATLANTA, GA.

The treatment of the morphine habit like that of other diseases, to be successful, requires the mixing of the remedies with brains. Each patient must be carefully studied as to inherited and acquired peculiarities, and particularly as to the trouble which originally led to the use of morphine.

If this can be removed by surgical operation or otherwise the chances of success will be greatly increased. Where this cannot be done, one must expect probably the greatest difficulty to be encountered from a return of that trouble, whether diarrhea, neuralgia or what not, and such measures should be adopted as are best calculated to limit that particular symptom.

In the large majority of cases a good hepatic stimulant and purge will do much to decrease the symptoms, and it may be necessary to repeat this as well as to follow it with intestinal antiseptics, for the heavily coated tongue, foul breath and horribly offensive stools show the need of this sort of medication, which does much to prevent and relieve vomiting, pains, and diarrhea. As to the choice of antiseptics this will depend upon the case, whether the trouble is in the bowel or in the stomach, whether there is vomiting, diarrhea, or constipation.

A very important point too in the limiting of alimentary troubles is the diet. Many patients have good appetites during the withdrawal of the opiate and will eat any and everything if allowed to, but will suffer evil consequences afterwards. The diet should be simple and nourishing, and those things likely to increase fermentative processes avoided.

With what is known as the *rapid* method, which is between the *sudden* withdrawal of Levinstein and the *slow* method, serious collapse is not likely to occur, but when the patient is debilitated to begin with, and, especially if there are vomiting and diarrhea, it may appear, and must be looked for and promptly met.

This rapid method is the one most frequently adopted, as few patients are willing to undergo the tortures of the sudden method, and few physicians to subject patients to the unnecessary suffering and the danger involved. The slow method has not proved successful, and the suffering it entails is too prolonged.

The successful management of these cases requires, on the part of the physician, firmness moderated by kindness, and a good knowledge of medicine in general; thoroughly trustworthy nurses, and constant vigilance on the part of both physician and nurses.

The morphinist undergoing treatment is constantly doing the unexpected. I thwarted a patient three times in one day in attempts at suicide. In one of these, being left in the room alone for a few moments, he detached the tube from a gas stove, turned on the gas and went to bed, putting the tube in his mouth.

Of course, above everything else, it is important that the physician know that his patient gets only what he directs, and one cannot be sure of this when treating a patient at home or among friends, for they will not resist the piteous appeals almost sure to be made.

The actual suffering in the majority of well managed cases is not great, but as the morphine is eliminated from the system a supersensitiveness develops, so that what an ordinary person would hardly complain of, to the morphinist is "suffering the tortures of the damned."

The time passes slowly for these patients, and much in the way of pleasant diversion is needed, but this must not be at the expense of giving the patient opportunity for obtaining morphine.

A HEAPING tablespoonful of washing soda to a quart of water is the proper proportion for the solution in which instruments should be boiled for sterilization. *Do not* boil non-metallic sutures in this liquid, for it will very greatly weaken them. *Do not* boil an aluminum instrument in this liquid, for it will be corroded and completely ruined. Silk sutures and aluminum instruments may be sterilized by boiling in five per cent. carbolic.—*International Journal of Surgery.*

Reading Room
Y. P. G. M. S. & H.
Not to Be taken from this Room

STRANGULATED HERNIA.*

BY VIRGINIUS W. HARRISON, A.M., M.D., RICHMOND, VA.,

Adjunct Professor of Practice of Surgery, University College of Medicine, etc.

In the study of this subject, we are considering one which, in a recent article before the Æsculapian Society of London, Mr. Stephen Paget says "lays before you a terrible list of the worst and most distressing cases that fall to the lot of a hospital surgeon." He refers to these cases in which the bowel is gangrenous, perforated, or broken at the time of the operation. Of such cases he had twelve: four were inguinal, four were umbilical, three were femoral, and one in the left abdominal wall. One patient died during the operation, five a few hours afterwards, two died on the second day, one on the third day, one (aged seventy-one) lived ten days, one (an infant) lived for five weeks, one recovered. Being a condition of almost daily occurrence, one that we may have to contend with at any time, and one which may lead to such untoward results, its discussion should be of benefit to us all.

By strangulated hernia we mean that a portion of the bowel, after passing through some opening (natural or otherwise) in the abdominal wall, has become constricted to such an extent that the circulation is interfered with, and, if not relieved, gangrene and death will result.

Strangulation may take place during some violent exercise, a knuckle of bowel passing through some natural opening, becoming constricted, or it may take place in an old hernial sac, by the addition of a fresh loop of bowel. It is not necessary that violent exercise should have originated the trouble, for this condition may be produced by an attack of diarrhea or dysentery, causing an increase of peristaltic action, congestion, swelling, and finally constriction by the engorgement of the bowel. There are other causes of strangulated hernia, such as injuries to the part by outward influences, impaction with fecal matter, etc., all too well known to be considered at this time. The seat of stricture is usually at one of the hernial rings, though it may be anywhere in the sac, where inflammatory action has taken place, and new tissue formed a constricting band.

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*Read before the Richmond Academy of Medicine and Surgery, July 28, 1896.

The local changes are those you would naturally expect when the circulation has been impaired or cut off—the amount of change being dependent upon the length of time, and completeness of the constriction. The symptoms as recorded in the text-books are said to be always about the same, viz.: faintness, collapse, complete constipation, vomiting, a tumor at the site of strangulation, severe pain at this point, an absence of impulse in coughing, and the fact that you cannot put the bowel back into the abdominal cavity easily, if at all. The pulse is a better guide than the thermometer, as the latter may indicate a subnormal or normal temperature.

Do not expect to find these symptoms in every case, for almost every writer on the subject records cases in which the symptoms were very mild. Paget, in his paper already referred to records one case of a patient who had walked into the hospital, suffering no pain, yet the operation proved the bowel to be already perforated, and of another who had had strangulated femoral hernia from Tuesday until Friday without being aware of the fact. She was thought to have had typhoid fever at first, as she did not refer to the hernia. At a further examination, the hernia was discovered, and the operation disclosed the fact that the bowel was perforated. This same gentleman incidentally refers to a case in his practice where the rupture did not take place at the seat of strangulation, but in a loop at some distance, which was bound together by old adhesions. DeGarmo admonishes us not to depend too much on local symptoms.

How shall we treat these cases? One writer goes so far as to say "the prognosis of these cases depends entirely upon the man who first sees them."

Preventive treatment by a radical operation would diminish the rate of mortality, but unless the preexisting hernia is a source of great discomfort to the patient, we unfortunately cannot obtain his consent to an operation, and even our advice to always wear a truss is not heeded, owing to the discomfort found in wearing one. So until we can educate the people to the danger of neglect in these cases we must await their presentation in a more dreadful condition, and use our best means for their relief, which is taxis and herniotomy.

We cannot lay down any particular plan for the treatment of strangulated hernia any more than we can for any other condition in which the morbid anatomy is variable. The condition of our patient in general, and the strangulated gut in particular, should engage our serious consideration, for to use taxis upon a gut already gangrenous or perforated would only consume time, and place the patient in a far more serious condition. If we should use taxis upon a case where suppurative peritonitis had taken place, and should be successful in replacing the gut in the peritoneal cavity, you can see it could but lead to a fatal issue.

Never use taxis when you suspect gangrene or perforation of the bowel, when the patient has suffered taxis at the hands of another, or in an old irreducible hernia. The results in these cases are more favorable in an inverse proportion to the amount of taxis. In a recent case, taxis may be tried for a few minutes, and if successful, delay is inadmissible. Taxis may be tried under an anesthetic, but should be done with care, as we are apt to use more force and do more injury than would be done by an operation.

If taxis is unsuccessful, explain the true condition of your patient to his friends and himself, and tell them the necessity of early operative interference, or you may have said of you (as was said of a writer on this subject), "We took him to the hospital; the doctor operated immediately, without waiting to see if he was strong enough to stand the operation."

We are often tempted to delay an operation to see if temporizing and palliative treatment will not relieve the patient. Relief often comes by such method, but an undertaker performs the greater service. When we wait for the severe symptoms, as was done a few years ago before an operation was indicated, the hour of safety has passed, and the patient is often doomed.

Even if our palliative treatment was successful in reducing the hernia, we should not see the condition of the bowel, and being aware that strangulation and perforation may take place after reduction, we think the patient would have a better chance of recovery by performing a herniotomy. The various methods of operating I will not discuss. Choose that one which you think will give the patient the best chance to recover from the strangulation; and if the condition of the patient will permit, that one which will radically cure the hernia. Sometimes in a recent case, after cutting the stricture and pulling down the bowel so as to examine the point of constriction, if you will envelop the loop in a towel which has been wrung out of hot water—or better, a hot saline solution—you will see the circulation restored, and the bowel can be replaced into the abdominal cavity with a feeling of safety. Even in very old people this method is sometimes successful, as was illustrated recently in a case of Dr. McGuire, the patient being in the eighty-sixth year of his age.

If we encounter a case in which the bowel is suffering from suppurative peritonitis, gangrene, or perforation, it would not be sufficient to follow the above method, and just what to do is often not easily determined. When the gut is gangrenous or perforated, of course there is but one thing to do, and that is to resect that portion of the gut; but an intermediate point between slight constriction and gangrene requires nice judgment.

The following conclusions by Dr. W. B. DeGarmo, in a paper on strangulated hernia, in the May number of *The Post Graduate*, are of interest and worthy of study:

1. Prompt operation saves complications and life.
2. Infants seldom require operation.
3. Medicines and external applications are dangerous, as their use causes delay.
4. Operations done early are neither difficult nor dangerous.
5. Rough handling is more dangerous than an operation.
6. Morphia stops symptoms, but does not stop destructive changes.
7. Local symptoms are misleading.
8. Hot water saves resection, or furnishes prompt evidence of its necessity.
9. Operate rather than attempt the reduction of a hernia acutely strangulated for twenty-four hours.
10. Open to internal ring in every instance.

11. Always draw the bowel down far enough to examine the point of constriction.

12. It is not considered good practice to give cathartics after strangulation and return of the suspicious bowel.

In concluding my remarks, I wish to report a case operated on by me and terminating fatally. The history of the case, and results shown by the post-mortem, were very instructive, and impressed upon me the importance of not returning to the abdominal cavity a gut which has not been examined, or a loop in which the circulation has not been fully restored.

On June 9, 1896, I was called at 6 P.M. to see W. G. W., aged fifty-five, white, a half-witted but physically robust individual, with a good family history, as given by his brother. This man had done a great deal of heavy work, such as cutting wood and lifting.

I found him at my first and only visit to his home, suffering with a strangulated inguinal hernia of the right side. He had had for many years an irreducible hernia, but it had never given him any pain until thirty-six hours before I saw him. His brother had tried to reduce the rupture; being unsuccessful, he asked me to see him. After an examination of a very few minutes, I advised immediate operation, and sent him to the Virginia Hospital, at which place the operation was performed at 9:30 P.M.

The gut was found to be strangulated, and in several places looked suspicious of beginning suppurative peritonitis. After cutting the stricture, and dissecting the adhesions to the sac, we enveloped the bowel in a towel wrung out of hot water, and continued to pour hot water over the towel and gut for some time. The result was an improvement in the condition of the gut. After consultation, in which we were equally divided for and against resection, we decided to resect the bowel. While active preparations for this part of the operation were going on, our patient became profoundly shocked, and looked like he would not last long enough for us to close the wound, and as there was some doubt as to resection being imperative, I put the bowel back in the abdominal cavity and closed the wound, after allowing for free drainage by means of iodoform gauze.

June 10th, 11 A.M.—Patient reacted well from the operation. Temperature, 99°; pulse, 80, and feeling very well. By 3 P.M. temperature was $102\frac{3}{5}$° F.; pulse, 100. One-grain doses of calomel ordered to be taken until he had taken six grains. As this had no effect upon the bowels, I ordered a dose of Epsom salts, but this was not retained. At midnight I ordered the calomel to be taken as before.

June 11th, 8 A.M.—No action from the bowels. An enema of glycerine was ordered, and was followed by a large action, and several later in the day. 10 P.M.—Temperature, 100°; pulse, 90. The belly was swollen some in the morning, but was now reduced somewhat by the free movement of the bowels.

June 12th, 11 A.M.—Temperature, 99°; pulse, 80; belly still swollen. 11 P.M.—Temperature, $97\frac{4}{5}$°; pulse, 80; belly not swollen at all.

June 13th, 11 A.M.—Temperature, 99°; pulse, 80; symptoms of septic infection indicated by delirium. The external wound was found to be infected; the stitches were removed, and wound washed with hydrogen dioxide (Oakland). 11 P.M.—The same condition of affairs, except the infection *seemed* less; the external wound looked better, which was again washed with the hydrogen dioxide.

June 14th, 11 A.M.—Temperature, 98°; pulse, variable; sometimes full and regular; at other times feeble and irregular. His mind cleared and could recognize every one, but would not take his nourishment. This condition of affairs continued until 6 P.M., June 15th, when he died.

A post-mortem was held at 6:20, and revealed a coil of bowel adherent to the abdominal wound; the portion of bowel which was strangulated was found imbedded in a mass of pus and inflammatory exudate; the gut, though not perforated, was gangrenous, and broke down in the handling to remove it; the rest of the intestines were all matted by suppurative peritonitis.

I report this case to emphasize—

1. The fact that we cannot rely upon local symptoms to indicate the amount of damage that has been done by strangulation; nor will they indicate what is going on in the belly after an operation.

2. That we can have septic peritonitis with a very small amount of fever, or even a subnormal temperature, a fairly good pulse, a very little pain, and the bowels acting freely; for in this case, though the post-mortem demonstrated a condition we would think to be sufficient to cause paresis of the whole intestinal tract, yet, after the first thirty-six hours, his bowels moved freely every day.
3. When a bowel looks badly and there is doubt about the circulation being fully restored, the patient will have a better chance of recovery, by resecting the diseased portion of bowel.

I am confident had I continued the operation in the case reported above, the patient would have died before I had finished; yet I realized the fact, in my opinion, when I replaced the bowel in the abdominal cavity, that his chance for recovery was very slight.

CÆSAREAN OPERATION UNDER DIFFICULTIES.

BY I. P. ALLRED, M.D.,
GENOA, FLA.

On January 7, 1896, I was called to see Mrs. S. A., multipara, age twenty-eight, white. Found her under the care of an old midwife who had been with her about twenty-four hours. On examination found a case of arm presentation and dead child. The presentation had lasted four hours; the left arm and shoulder pressed against the pubic arch, head jammed in left iliac fossa, legs folded over front breech in fundus of uterus. Of course the first thing to do was to change the position so as to bring the head to the correct position. I thoroughly disinfected my hands and endeavored to return the arm, but on return of pains it would be forced back. In the intervals, while I had the arm returned, I introduced my hand into uterus and endeavored to dislodge the head from its position, but utterly failed. The force exhausted by uterus could not withstand. The arm would be forced out whenever there was a recurrence of the pains, although they were slow and weak. My next idea was resection, but taking into consideration the situation and condition of the patient, I did not believe she could live through the length of time it would take me to resect with the arm and shoulder presentation. It was now about two o'clock in the morning, and a dark, rainy, wintry night, in a log-cabin, and it was well ventilated; the wind would blow out the light every now and then, which was a small brass lamp, with no chimney. My only assistants were her husband and sister; neither could look at the operation. So the next daring idea was Cæsarean operation. Of course I recoiled with horror from this, but was I to let the woman die there for lack of courage? The patient begged me to relieve her somehow, if I had to cut it out. She had by this time become exhausted. I told them of the gravity of the operation of cutting it out, as she might die under the operation; but after laying the danger of the case before the entire family, it was decided that I go ahead and take the child from the woman as quickly as possible; it would only be death anyhow, as she was sinking fast. Pulse scarcely to be felt at wrist, so I prepared my instruments, gave her one grain morphia hypodermically and got my antiseptics ready, which were bichloride mercury and acid carbolic. My only assistants were her sister to hold back the intestines and her husband to hold the light; neither could look. The sister would hold where I put her hand. I took my scalpel and made a nine-inch incision, beginning about two inches below the navel point, down the median line just as she lay in bed; then an incision into uterus, where I found fetus driven into the inferior strait of pelvis, and so impacted that very much force had to be used to dislodge it. While I was thus engaged, with the cold January wind playing havoc with the single old brass lamplight, her sister held back the intestines with her head turned so as not to behold the awful yawning cavity that had been made in the woman's abdomen. I succeeded in emptying the uterus of its contents bruised and extravasated to an awful extent; placenta came away as the uterus proceeded to contract beautifully on the removal of fetus; it contracted to six inches in a few minutes. I next proceeded to sponge out the pelvic cavity with the antiseptic solution above mentioned, also the cavity of uterus. I then proceeded to stitch up the uterus, which took five silken stitches; returned the intestines after washing them in a tepid solution of same. Then I began at top of abdominal incision, and stitched it up with ten stitches, leaving a drainage hole at the bottom. I used no drainage-tube, as I recollected seeing somewhere if there is a rubber tube left in abdomen to come in contact with the intestines they would slough. I dressed the wound with the same antiseptic, using a piece of absorbent cotton. I had used no chloroform, ether, or any anesthesia. She stood the operation bravely, said the pain was not as great as the one she was in. She did not sink from shock. I only left Dover's powders to be given to hold back the peristaltic movement and to soothe patient, and left her resting quietly. On the 9th I saw her again, and found her resting quietly. No unusul fever; of course there was acceleration of circulatory movement. I irrigated the uterine cavity every other day for nine days, using Allen's surgical pump. Then I removed the stitches and found that I had got union by first intention most beautifully, except the drainage opening; and on washing out the uterus the solution would make its appearance through the drainage opening in abdomen; so I discontinued the irrigation and had them to use the same solution with a common female syringe twice a day. The main points about it were the small quantity of hemorrhage, no tympanitis or peritonitis, or abdominal soreness. She made a rapid and splendid recovery, with the exception of swelling of one of her legs, which was relieved without much trouble. Will say in conclusion that I kept the abdominal wound wet with the bichloride and acid carbolic solution until I removed the stitches on ninth day. Then I used iodoform and had it dressed three times per day. I never used any water from beginning to end without first being boiled. I gave her constitutional treatment from beginning.

EPIDEMIC TYPHOID FEVER.*

By WILLIAM S. GORDON, M.D., RICHMOND, VA.,
Professor Physiology, University College of Medicine, Richmond, Va.

My design in this paper is not to treat the subject exhaustively, but to present a running commentary on about twenty-five cases of typhoid fever occurring in an institution for boys of which I was at one time the attending physician.

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*Read before Richmond Academy of Medicine and Surgery, July 14, 1896.

The disease made its appearance early in September, 1895, and prevailed until the close of the year. If dysentery and gastro-intestinal disturbances be included, the whole number of cases would amount to thirty-five or forty. Under the measures adopted, with the intelligent and unremitting attention of a trained nurse, we were fortunate in having no deaths.

The first cases owed their origin to the use of polluted well water; while others, occurring later in the epidemic, were due, in my opinion, to the use of water from a polluted stream. The cases developed after the usual incubating period—two or three weeks from the entrance of the poison into the system; and the arguments for the correctness of my views as to the cause of the outbreak are irrefutable. It is needless to discuss this portion of the subject.

I had a hospital erected for the patients, and the directions regarding disinfections and other hygienic measures were faithfully followed by the head nurse.

The grouping of the cases enabled me to observe, to the best advantage, the difference in the course of the disease, the symptoms, and the response to treatment in individual cases; and the demonstration that a common infection may produce many exceptions to the ordinary and classic symptoms of the typical disease was conclusive. I am also further established in my belief that the cases of so-called typho-malarial fever are, in the large majority of instances, cases of atypical typhoid fever, the difference in symptoms being partly accounted for by the concentration of the poison and the susceptibility to it of the individual constitutions.

In most of the cases the invasion was abrupt, resembling that of malarial fever or the grip. Epistaxis occurred in a few cases. Constipation was oftener present than diarrhea. The highest temperature was 105$\frac{3}{5}$°; the most rapid pulse about 130. Headache was common, and either a decided chill, or chilliness, was the rule at the onset. The cutaneous eruption occurred in several cases. Right iliac or abdominal tenderness, with tympanites, was almost uniformly present. The brown, dry tongue was noticed here and there, while marked nervous symptoms—muttering delirium and semi-coma—occurred in a few instances, and active delirium in two. Sweating was observed occasionally, and bronchitis was rarely absent. The fever was, at times, irregular; but the morning remission and afternoon rise were quite constant. In one or two cases, the pulse-rate was slow and the beat sluggish, and, I might say, distrustful. Serious hemorrhage from the intestines occurred only in one case.

The shortest duration was about ten days—the longest nearly two months. Post-typhoid insanity of a mild type occurred in one instance. Sore feet was a prominent symptom in one case, and was much complained of by the patient.

Several patients had pain in the joints. Obstinate constipation developed in three or four cases, requiring mechanical means for its relief.

Such was the general course of the epidemic.

My routine plan of treatment was to put the patient to bed immediately, reassure and quiet his mind, have his clothing changed and his skin cleansed, order a liquid diet—milk, or milk and broth alternately—and quinine to gentle cinchonism if the symptoms of typhoid fever were not sufficiently marked to justify a positive diagnosis.

My experience with quinine leads me to believe that it will almost infallibly cut short a malarial fever, but never typhoid. In the latter disease, I have seen the drug reduce the temperature, as it often does in other fevers; but on the other hand, I have also seen the temperature rise after its administration. This result may be due at times to the natural course of the disease, but at others it is doubtless owing to the irritating effect of the agent upon some constitutions. My rule, therefore, is to discontinue it if the fever does not yield in several days, and not to resume it until convalescence, when with some preparation of nux vomica or other tonic it is of great service.

Sweet and buttermilk were the basis of dietetic treatment, especially the former. Buttermilk, or sweetmilk, with strained oatmeal gruel, served a good purpose in the cases characterized by constipation and mild symptoms; and in these I also used occasionally steamed eggs, beef extract, and fresh crackers soaked in milk. If the fever rose, I returned to milk alone, or milk and broth. When diarrhea was present, milk and barley gruel, or milk with arrow-root, proved very serviceable; or milk and lime-water alone. In other cases, a pinch of salt in the milk rendered it agreeable, and evidently more digestible. The free use of pure water was ordered. The adaptation of the diet to the requirements of individual cases is, in my opinion, one of the most important measures in the successful management of typhoid fever.

Chloral-thymol was used freely with good effect.

For the fever, sweet spirit of niter, spirit of mindererus, and tepid baths were used. The patients were bathed by running oil cloths under them and sponging freely when necessary. These measures sufficed to keep the skin and kidneys active. Constipation was relieved by enemata every other day, or every day, according to indications, with an occasional dose of oil if required. Diarrhea was untreated except when the passages were more than three or four in the twenty-four hours. Bismuth, or bismuth and paregoric, answered every purpose. The brown, dry tongue and meteorism were in nearly every instance relieved by an emulsion of turpentine, to which the bismuth, or bismuth and paregoric, was added, when required to keep the diarrhea in check. Salol was employed in several cases, and appeared to act well.

Epistaxis had to be controlled in one case by the injection of a strong alum solution into the nares. Cold cloths to the head mitigated the cephalalgia.

Turpentine stupes were used for abdominal pain. I wish to say a few words with regard to the use of turpentine. There is no one drug which seems to me to meet so many indications, and my increasing experience with it leads me to have an increasing respect for its power. I do not claim infallibility for it, but it is a stimulant, a diuretic, an antiseptic, a healer of intestinal ulcers and of inflamed mucous membranes in general, and a styptic. In my hands it has rarely failed to accomplish some good—notably in lessening the meteorism and restoring the dry, brown tongue to its moist condition.

In many of the cases dilute phosphoric acid appeared to render the patient more comfortable. It is a mild feeder of the nervous system and a refrigerant. Alarming hemorrhage occurred in one case. The nurse had been prepared for this, and narcotized the patient promptly with paregoric, administering turpentine, withholding all food for twelve hours, applying an ice-bag to the abdomen, and enforcing absolute repose of body and mind. Insomnia was met with cold sponging, accompanied with stimulation in cases of exhaustion. The bromides acted well on several occasions. I did not have to use opiates, but have used them with marked beneficial effect in nerve exhaustion and active delirium.

Bronchial symptoms were treated with turpentine plasters. One of the youngest cases had to be fed by enemata for a short while. In this case and one or two others, the heart was so weak at times that I almost despaired of being able to strengthen it, but the free use of whisky and strychnine accomplished all that could be desired.

One of the worst cases was that of the young man who assisted the head nurse in her arduous work. He walked into my office with the disease well-developed, and was sent to the Virginia Hospital, where, under the skillful attention of Dr. Vaden, the house physician, and the nurses, he had a long but successfully fought attack of the disease. I do not know whether he disregarded my orders as to the polluted water, or whether he was negligent in handling the patients and received the poison at close range, so to speak. In this case, Cheyne-Stokes respiration was marked for several days, while as much as one-fifth of a grain of strychnine within two or three hours was, on one occasion, with other measures, required to sustain his flagging heart. In this case, also, the meteorism yielded promptly to salol and gave no further trouble. The slowing and strengthening effects of digitalis on his heart were noticeable.

I do not believe that we have any specific treatment for typhoid fever. Hundreds of physicians have hundreds of remedies, but the disease is apt to run its course. The very fact that excellent results are reported from so many different kinds of treatment is sufficient proof that nothing has the same influence for good in typhoid infection that quinine has in malarial diseases. I do not believe, therefore, that typhoid fever is aborted in the sense that the germ is destroyed; but I do believe that its course may be abridged or modified by appropriate treatment adopted—in the early stages, especially—of the disease. Furthermore, there can be little doubt in the mind of the close observer that intestinal antisepsis and elimination are very important elements in correct treatment. This does not imply such a purgation as would tend to irritate an inflamed or ulcerated bowel, nor such an attempt at antisepsis as would be likely to kill the patient and not injure the germ, which is also engaged in the effort to kill.

This epidemic convinces me additionally of the facility which water offers for the conveyance of the typhoid infectious material. It cannot be held that the germs may not be borne at short distances in the atmosphere, breathed in and lodged in the alimentary canal. Air can float germs as well as water, but from the very nature of things it can be easily seen how much more liable the system is to be infected by the germs of typhoid fever in water than in the air. The same multiplication of the germs in water and milk must be bore in mind.

As already previously intimated, the study of this, as well as other epidemics, proves conclusively that one poison does not, in each case, produce necessarily the same set of symptoms. The very opposite symptoms, in typhoid fever, of diarrhea or constipation may be noted. In one case, the fever may run a classical course; in an other, it may hardly rise above the normal, or else be sub-normal. And the remark applies to other symptoms. Before we finally sanction the name of a new disease—typho-malarial—it must be clearly defined to what extent the symptoms of atypical typhoid fever may be observed.

I do not claim that my methods in the treatment of the present epidemic are superior to those adopted by clinicians of wider experience. In the treatment of one symptom, various remedies, acting practically in the same way, may be employed. I have laid down only the general lines of therapeusis, as I conceive them, while I reiterate my fixed belief that until a true typhoid germ-destroyer is discovered, we must depend upon careful hygienic measures, intelligent nursing, and judicious intestinal elimination and antisepsis.

410 *East Grace street.*

SOCIETY REPORTS.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

Regular Meeting, July 14, 1896—*Dr. Landon B. Edwards, President, in the chair.*

Dr. Wm. S. Gordon read a paper on "The Treatment of Typhoid Fever, with a Report of Cases." [See page 454.]

DISCUSSION.

Dr. J. W. Long asked the temperature of the baths used, and if they were the only antipyretics employed.

Dr. Gordon.—The temperature was a little below normal, and gradually reduced. He endeavored to reduce temperature by nature's method, through the skin. He certainly would not use the Woodbridge method in atypical cases, especially where constipation is marked.

Dr. Jacob Michaux wished to give some personal experience. He desires to call attention to the great good obtained from the use of strychnine. Benefit is derived through two channels: the effect upon the heart, the effect upon the nervous system, both being "toned."

One of the most important duties falling upon the doctor in typhoid fever is the maintenance of the integrity of the stomach: Take care of the stomach, and the patient can better bear disease, especially if the siege be a long one.

Another observation is, we are often too nervous about the diarrhea. It is eliminative, and unless the number of actions is sufficient to weaken the patient—say over six or seven a day—it is better to let it alone.

The subject of antipyretics in typhoid is an important one. He is afraid of coal-tar preparations, as they are too depressing. The administration of water is of vast importance—allow it freely for drinking purposes, as it aids the emunctories. When used externally, no antipyretic can compare with it, it reducing fever decidedly and safely.

He prefers the use of whisky to brandy—being cheaper and obtainable in a purer state. It should, however, be used cautiously, but persistently.

DR. GEO. BEN. JOHNSTON said Dr. Gordon's paper suggested some points upon which he wished to speak. He has no belief in the existence of typho-malarial fever. The reports of so-called typho-malarial fever are cases of atypical typhoid. It has been his experience that we see very few typical cases in this region, the majority being the so-called typho-malariæ, in which quinine produces little or no effect except to aggravate the insomnia of the early stage, increase nervousness, and but seldom appreciably reduce temperature. If the last is effected, the advantage is dearly bought.

Now, he never administers quinine beyond the point of testing the fever, and if no response is early elicited, he abandons it.

Regarding the coal-tar preparations, he agrees with Drs. Gordon and Michaux. No harm—on the contrary, much good can be obtained from the use of small doses of phenacetine in the early stage, for cephalalgia and the general aching. He would not continue its employment later, when the circulation is depressed. For the relief of epistaxis, a 10 per cent. solution of antipyrine sprayed in the nostrils is efficacious.

Regarding turpentine, it is an old friend, and physicians are too apt to overlook it. Dr. Gordon is right in valuing it, being especially useful in the later stages.

Comparing first, the old depletive treatment, large doses of calomel and copious bleeding, and second, the expectant plan, with the modern method, the essence of the latter-day success may be summed up as—1, absolute rest in the recumbent posture, nothing is more dangerous than to allow the patient to sit up even for stool; 2, abundance of such food as will sustain and not irritate, viz.: sweet and buttermilk, thin broth, and copious draughts of pure water which carries off effete material; 3, thorough ventilation, even in winter.

DR. EDWARD McGUIRE believes in little medicine; many cases can be treated without it. It is most important to preserve the stomach. He wishes to go on record as opposed to all antipyretics except water. For the first two days he gives quinine for diagnostic purposes.

Regarding rest, he agrees with Dr. Johnston, for we can never tell, even in mild cases, the extent of typhoid lesions. He impressed the importance of administering abundance of liquids, and referred to Pepper's success with nitrate of silver.

DR. J. A. HODGES.—Cases vary so much that it is difficult to establish any routine plan of treatment. His method may be divided into—1. Nutritive and tentative, comprising nourishment, rest, attention to the *primæ viæ*, strychnine, and digitalis; for diarrhea, beta-naphthol, and copper arsenite with morphine. He has never seen the latter combination fail. 2. Modified Brandt which he administers himself. No coal-tar product should be given in a disease whose tendency is to devitalize. 3. Chlorine treatment, which he has used since it was first introduced. For meteorism, sordes, tympanites, and diarrhea, he has not seen the time when it has not done more than turpentine.

DR. HUGH M. TAYLOR thought in transfusion of normal saline solution we have an agent of great potency in treating the depression of typhoid fever which threatens life by the heart. Within the past week, this had been impressed upon him. In the seventh week of fever, a young woman was apparently dying from exhaustion. Was cold and sweating and unconscious from great depression. Respiration, 30 or 40; pulse, 140, and absent at the wrist. The continuance of life seemed a matter of only an hour or two. Whisky and strychnia, and digitalis and caffein, and nitro-glycerin had been pushed as rapidly as was thought safe, with no perceptible influence for good. A quart or more of saline solution in the cellular tissue of the thigh and shoulder became diffused by massage, but apparently was not taken up by the vascular vessels; certainly produced no appreciable effect upon the heart. Such was the undistended condition of the blood-vessels, even after cording up the arm, that it was difficult to find a suitable vein. Into the open vein the sharp point of the glass pipette of an eye-dropper was fastened by a ligature, and the other end of the pipette was fastened in the end of the long tube attached to a fountain syringe. This quickly improvised transfusion apparatus acted nicely. By the time as much as a pint of fluid had been introduced into the vein the pulse was full and strong, and the introduction of a quart in all increased the volume and arterial tension until the moribund patient's pulse was stronger than that of any of the attendants. The skin became dry, the color to the face and lips more natural, and the extremities warm. Not much improvement in the breathing was noticed; and while the volume of the pulse was so much improved, its rapidity was not correspondingly decreased. The pulse-rate continued very rapid, and the respiration rapid and shallow.

The improvement, after the transfusion, lasted five or six hours, at which time the pulse lost in volume until the wrist-pulse was indistinguishable. Transfusion direct was again resorted to with the same encouraging result of increasing the arterial tension and drying the skin, but no effect upon the pulse-rate or the respiration was apparent. This last function became more and more embarrassed, and was the ultimate cause of death.

His experience in this case impresses him with the belief that we have in transfusion a means of great value in the depression incident to hemorrhage in typhoid fever, and possibly an adjunct in the depressed circulation resulting from any one or more of the many complications arising in typhoid fever.

DR. J. W. LONG agrees with the treatment given by Dr. Gordon with the exception of digitalis. The criterion of its value is the effect in the case under observation. In some, it acts well; in others, it makes the heart weaker.

Regarding shock sometimes observed in administering the bath, it may be obviated by constant friction to the extremities while the patient is in the water.

DR. ARTHUR JORDAN adds his evidence as to the success of the chlorine treatment. He believes that in the course of time the antiseptic method will be the accepted one. He thinks that the patient is often over-fed, verified by the tympanites and the appearance of indican in the urine, indicating fermentation in the bowel.

Diagnosis may be made by microscopic examination of the blood.

In the first week, there is an increase of polynuclear cells in cases where complications, as of lung and kidney disease, may ensue. In the second week, there is an increased lymphocytosis diagnosing typhoid from other infectious diseases. In every instance, the nucleus of the lymphocyte is larger than that of the leucocyte, indicating nature's method of cure. Another condition is the marked increase of polynuclear cells, which, if occurring in the third week, shows suppurative processes to be abnormally increased.

DR. J. W. HENSON said the action of digitalis is uncertain because of the uncertainty of the preparation.

DR. GEORGE BEN JOHNSTON said the Brandt method is the most satisfactory antipyretic measure. The danger line of typhoid is a temperature of 103°. He has seen a temperature of 104° reduced in fifteen minutes to normal; he has seen it kept down for twelve hours; has seen it rise again in two hours.

DR. LANDON B. EDWARDS thought the abuse of some of the coal-tar derivatives had been emphasized too much in this discussion. It was undoubtedly because the gentlemen had used too large doses of phenacetin, antipyrine, etc., seeking too immediate results. It is too much forgotten that while large or even beyond moderate doses of phenacetin—anything more than four or five grains—reduces arterial pressure, *small doses increase and maintain the same.* Doses of this drug not exceeding two or three grains, every three or four hours, so as not to exceed twenty grains a day, are safe, and usually effective in keeping the temperature down to 101° or 102°. In moderate doses it will not reduce the temperature beyond the normal. It is a curious fact that it acts best in reducing fever temperatures during the hours after ten or eleven o'clock in the day, and there is not much to be expected of its after-midnight administration. There is no objection to combining it with strychnine or digitalis, as he often does. He almost invariably combines it with some antiseptic, such as salol. Like salol, phenacetin is taken up chiefly from the small intestines. And it is not improbable that its long-continued use in small doses favorably influences the typhoid ulcers of the small intestines; for the value of phenacetin, as of antipyrine, as a local application to ulcers in general, is too well known by practitioners to need emphasizing. Between these doses of phenacetin, he has come to rely with much confidence upon the "chlorine treatment," as described many years ago by Watson, later by Murchison, and more recently by Yeo. In a broad-neck twelve-ounce bottle, put fifteen grains of chlorate of potash; add slowly one drachm of strong hydrochloric acid. The characteristic green vapor develops. Add gradually an ounce or two of distilled water, pouring it down the side of the bottle, and put in the stopper so as to let none of the chlorine vapor escape. After awhile whatever quantity is not absorbed by the water settles on its surface. Then gradually add more water, and so proceed until the bottle is filled with water. These details as to the preparation are important; for, as Mr. Hugh Blair remarks, a different chemical result follows if water is added in advance of the hydrochloric acid. Dose of this mixture, an ounce every two to four hours. If the taste is disagreeable, add an ounce of syrup of orange peel to the twelve-ounce chlorine mixture. Yeo claims that 24 to 36 grains of soluble quinia added to this mixture helps its antifebrifuge action; but Dr. Edwards has been better satisfied with the phenacetin in the manner spoken of. As to the chlorine mixture, it promptly cleans the tongue; it perfectly deodorizes the bowel discharges in two or three days, and, especially when combined with the phenacetin treatment, it reduces the febrile temperature; its maintains physical strength and mental clearness; assists in assimilation of food; acts its part as an antiseptic, and shortens the average course of the fever. Of course such is not the full line of treatment, for recumbency, quiet of surroundings, composure of mind, the sufficient use of water as a drink, and the topical use of cool water sponging or wet packs, the supply of proper nutritious fluid diet, etc., are essential. Half the battle, it may be, depends on the faithful, well-trained nurse; but fully the other half depends on the able, experienced, and ever-watchful, judicious doctor who does not become a routinist. For the past eight years Dr. Edwards has adopted the general line above described, with the loss of a single typhoid patient; and that one, in July, 1891, was a case in which he did not follow out the principles above spoken of. That case set in as a profuse hemor-

READING ROOM Y. P. G. M. S.

rhagic case. Incidentally he remarked that *early* profuse, repeated typhoid hemorrhagic cases are those that appear to set at defiance the results of any plan of treatment yet devised. In comparing his results with those who adopt the Brandt or the Woodbridge, or any other specific plan of treatment, he sees no reason to prefer a change of base. Carter, Czerna, and others long ago pointed out that *small doses* of phenacetin increase arterial tension; while all agree that *large doses* reduce the same, and that it acts directly on the thermogenic centers, lessening the production of animal heat and slightly decreasing heat dissipation. Of course these remarks are intended to discuss but a partial phase of the important subject of treatment of typhoid fever, and are brought out only because of the surprising disfavor in which coal-tar antipyretics seem to be held by some of the speakers to-night.

In closing the discussion, Dr. Gordon congratulated the Academy on the unanimity of opinion regarding the subject under discussion, and was gratified to have his own views corroborated by the expressions of the different speakers.

He hoped that Dr. Jordan and others, who were devoting special attention to the examination of blood in disease, would continue a work which, to a greater or less extent, will give us the priceless advantage of accurate diagnosis in the early stages of fever and other morbid conditions. He looked for great discoveries in this department of pathology.

Personally he had expressed himself as not unwilling to use the coal-tar antipyretics, when indicated in the first days of fever by a sufficiently strong pulse and high temperature. Several patients in the group had been given phenacetin with benefit. And so he agrees with Dr. Edwards that the drugs in question may prove of great service if administered in judicious doses and under justifying circumstances.

With regard to digitalis, Dr. Long had misunderstood the tenor of his remarks, which was to prove that this drug may serve a good purpose by slowing and consequently strengthening an exhausted and rapidly-beating heart. This agent stimulates the inhibitory vagus, and its action can, as a rule, be controlled equally as well as a great many other agents are controlled. It must be reliable, and, when used generally, be administered when the patient is recumbent, in order to obtain the best effects. He cited the case in which its effects were so marked as a commentary upon Dr. Osler's remark that, personally, he is not convinced that digitalis does good in the failing heart of fevers. The results observed from its use alone, or combined with strychnine, will sometimes be entirely satisfactory. He would not continue it unless its physiological action was produced within a reasonable length of time.

Dr. Taylor's case, in which he had been a willing and profited assistant, was well worthy of mention. He had never before seen so prompt a relief of the symptoms of collapse; and the possibilities of direct transfusion in conditions which were favorable to permanent benefit from this measure were difficult to estimate.

He would be glad to use the chlorine treatment so highly lauded by Drs. Hodges and Edwards, and intended to do so when opportunities presented for this or any other special antiseptic remedy. In referring to turpentine, the design was only to emphasize the numerous indications occurring at the same time which could be met with this familiar but none the less valuable drug.

Dr. Pepper's statement (quoted by Dr. Edward McGuire), that one hundred consecutive cases of typhoid fever occurring in private practice and first seen, as a rule, in the early stages, had been successfully treated with nitrate of silver alone or in combination; and that under this invariable treatment in all private cases, for a period of ten years, no death had occurred, was well worthy of consideration, coming from so high an authority. Dr. Frederick P. Henry, of Philadelphia, had commented, however, upon Dr. Pepper's statement, referring to the fact that the cases were in private practice, and that the unusually excellent results were doubtless largely owing to the great advantage of early and good hygienic and medicinal treatment which Dr. Pepper's patients enjoyed.

DR. GORDON said, in conclusion, that, in his opinion, relapses were due, in the vast majority of cases, to dietetic indiscretions or to a too early rising from bed. It was quite true that relapses did occasionally occur when no special cause could be assigned; but, in his experience, relapses had been owing to the disregard of his injunctions as to diet and exercise. Too much stress could not be laid upon this point.

CORRESPONDENCE.

MEDICAL NEW YORK.

NEW YORK, August 15, 1896.

The Reformer is abroad in Gotham, and much in evidence. The old-time Tammany Society, which for so long controlled this great city from center to circumference, has been retired, for the present at least, and the places that once knew it and flourished by it now know it no more. The Reform Government, whose *in hoc signo vincemus* was "Anything to Beat Tammany," is now on top, and in their wild desire to establish municipal cleanliness, rectitude, and honesty, they "stand so straight that they lean backwards." It is particularly questionable whether the efforts of Dr. Parkhurst to close up the so-called dens of prostitution have accomplished any desirable results. Few, I think, believe that this business can be stopped by any laws at present known to us. All, I am sure, know that it goes merrily on in New York, as before.

The spirit of reform is to be noted in New York's great Department of Charities as well as elsewhere. This department in times past, as well as the present, has been the *casus belli* for many dissensions, more or less spirited, among the local medical fraternity. The faculty of Bellevue Medical College once enjoyed the entire control and patronage of Bellevue Hospital, or the City Hospital. The University Medical College and the College of Physicians and Surgeons in time made a vigorous kick in behalf of their faculties and their demands were satisfied. Now another lively fight is on. A number of physicians in the city, not connected with the teaching faculty of either college, have united to demand what they conceive to be their rights in relation with the great quantity of clinical material in the city hospitals. The outcome of the contention is important to doctors here, and is being watched with interest.

The use of cocaine in surgical practice is becoming more and more general in New York, and the opinion prevails, at least among those who have given cocaine an extended trial, that many operations which are usually performed under general anesthetics may now be done easily and painlessly under the local. The use of Schleich's formulæ and of his method of injecting the cocaine solution has no doubt had much to do with this wider employment of local anesthesia, as it is his method, or some slight modification of it, that is being followed, as a rule. Dr. Wyeth, of the Polyclinic, and his assistant, Dr. Bodine, are especial advocates of cocaine anesthesia. Dr. Wyeth has operated for appendicitis and also for hernia under cocaine, and only lately he removed the entire larynx; besides tumors of various sizes and in various regions of the body; and all painlessly. This is somewhat introductory to the mention of an interesting case which I saw last week. A patient in the Polyclinic was thought to have a malignant growth of the larynx, which had encroached upon his rima glottidis and seriously reduced his breathing space. Tracheotomy was decided upon preparatory to a complete removal of the larynx. This was done by Dr. Bodine. Schleich's *medium* solution of cocaine was employed. (These formulæ were published in this JOURNAL about three or four months ago. The medium solution consists of one grain and a half of cocaine, one-third of a grain of morphine, three grains of sodium chloride, and three ounces of distilled water. Two or three drops of carbolic acid or five grains of boracic acid may be added to prevent decomposition.) This solution was freely injected *in* the skin, not *under* it, along the line of the proposed incision. The skin and underlying connecting tissue were divided and the muscles lying on either side of the median line were exposed and drawn aside. As soon as the trachea was bared a moment was allowed for all oozing to stop. Then it was the work of a second to divide the cricoid cartilage, and the next ring of the trachea. The whole was done absolutely without pain, and it made a very pretty and instructive illustration of what may be accomplished under cocaine anesthesia. It was intended to remove the larynx at yesterday's clinic, one week after the tracheotomy, but the relief of congestion which followed this operation had produced such a diminution in the size of the growth that it was decided to await further developments. It is impossible for a patient to absorb a poisonous quantity of cocaine when it is used according to the method of Schleich. It was estimated that the above patient did not receive more than a fiftieth of a grain, and yet this was sufficient, with the other constituents of the solution, to produce a complete anesthesia.

Speaking of cocaine one is reminded of the new local anesthetic, eucaine, which is attracting some attention here,particularly in ophthalmic practice. If all is true that is claimed for it, it will possess some distinct advantages over cocaine in ophthalmic work. The hydrochlorate is the salt most used, and is sparingly soluble in water. A few drops of a four per cent. solution in the eye is said to cause complete anesthesia in one to three minutes. It does not dilate the pupil. Eucaine is practically non-poisonous, and solutions of it do not undergo decomposition. It is to be hoped that further trials of eucaine will confirm the somewhat meager reports thus far made. The reader will perhaps be pleased to know that chemically eucaine is a methyl-benzoyl-tetramethyl-gamma-oxypiperidine-carbonic acid methyl-ester. At least I was told so.

Another new remedy which promises to be useful, especially in ophthalmic practice, is formalin. Heretofore this preparation has been employed principally as a germicide and preservative agent. Solutions of it, 1–100, are now being employed to touch corneal ulcers, and 1–2000 as a wash for purulent ophthalmia and trachoma. Solutions (1–3000) may be freely employed in the eye every hour. It does not precipitate albumen, nor does it injure instruments. The testimony of those who are using it is highly favorable to it as a valuable antiseptic in ophthalmic work. It is said to be much superior to the usual solutions of bichloride of mercury.

The *Medical Record* (Aug. 8th) contains a good article by Dr. R. Frothingham, of this city, upon the "Importance of an Understanding of Middle Ear Disease by All Practitioners," in which he calls attention to the fact that medical schools have as yet paid little attention to diseases of the ear. Consequently practitioners have gone forth to heal with little or no knowledge of this portion of their art. The author cites a number of illustrative cases first examined or treated by general practitioners who seemed to possess a woeful lack of knowledge of the primary principles of ear diseases.

It is to be hoped that in the boasted advances which we have been making in late years in medical teaching these mistakes will now be fewer and further between. The author makes a strong plea for a better understanding of the general principles of ear diseases on the part of practitioners.

Perhaps no operation is now established upon a more secure surgical and scientific basis than that of opening the mastoid cells for purulent middle ear disease. Where the operation can be properly carried out the results are usually all that can be hoped for in these serious conditions. I have had the pleasure of witnessing several of these operations in different institutions here, and a few days ago assisted in opening both mastoids in the same patient for a double acute purulent otitis of two weeks' duration. I am told that the result has been quite satisfactory.

Nowhere, so far as I know, have the indications for opening the mastoid been more clearly and succinctly set forth than in a late paper by Dr. Felix Cohn, read before the Manhattan Medical and Surgical Society. For the complete paper the reader is referred to the *New York Medical Journal*, August 8th. These indications, as the author conceives them, are stated briefly as follows: (1) all cases of diagnosticated osteitis which are not relieved by usual antiphlogistic measures; (2) cases of antral empyema which show no tendency to discharge completely through the middle ear; cases of protracted otitis with profuse otorrhea which shows no tendency to resolve within a reasonable period; the time chosen for operation depending upon the manifest symptoms, whether, for instance, retention is present or the mastoid bone itself is involved; (4) cases of acute otitis which present dangerous symptoms of resorption and in which proper drainage cannot be established by paracentesis or by the natural perforation; and this may be done for drainage and cleansing purposes even when no manifest symptoms of mastoid affection exist; (5) cases of muco-purulent otitis depending upon mastoid involvement; (6) cases of mastoid disease or otitis complicated by lymphangitis or lymphadenitis, in which there is imminent danger of the formation of an abscess, or in which the lymphadenitis does not tend to resolve under ordinary treatment; (7) cases of protracted otitis in which there are symptoms of serious secondary complications involving danger of extension of the inflammation inward toward the neck; (8) cases of acute otitis in which complicating stenosis of the external canal promotes drainage and thorough cleansing of the middle ear.

L. B. GRANDY, M.D.

WHEN MAY GONORRHEAL PATIENTS MARRY?

Following are the conclusions of a paper on this subject by Dr. F. C. Valentine (*Am. Medico-Surgical Bulletin*):

1. Gonorrhea, *per se*, is a dangerous disease, but curable at any stage.
2. Even when all external evidences of its existence have disappeared, the patient may still be able to infect.
3. A woman infected with gonorrhea is in danger of her life.
4. No man should marry who can infect his wife.
5. In a week or ten days' time it can be determined whether a man can infect or not. This can be done by throwing some irritant injection into the urethra and examining the discharge for gonococci. If gonococci be present *the patient must not marry* until they are made to disappear absolutely and entirely.

CONCENTRATED MILK.

A writer in the *British Medical Journal* has called attention to the value of concentrated milk in certain forms of diarrhea and in wasting disease, and especially in cases in which the patient is unable to take other nourishment, and cannot take a sufficient amount of milk in its ordinary diluted form to meet the demands of the body. Concentrated milk is prepared by evaporating the milk in a porcelain dish over some suitable heating apparatus, care being taken to see that the liquid does not boil and to stir it continually. By this means cream is prevented from rising, and the evaporation is not delayed by the formation of a scum over the surface. With proper apparatus and attention, milk may be reduced to one-half its volume in one hour.—*New York Medical Times.*

EDITORIAL.

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DRINKING WATER.

The necessity for health of a pure supply of drinking water was long ago recognized. For example, the Romans preferred the cost of nine aqueducts connecting the city with the surrounding hills, and furnishing three hundred gallons per head daily, to drinking from the Tiber which flowed through their midst; and there is reason to believe that at a much earlier date the Chinese and Egyptians took the trouble to bore artesian wells of great depth in search of an efficient supply.

The purity of water depends, of course, not only upon its source, but upon its freedom from subsequent contamination as well. One of the first and most important duties of the public officers of cities, towns, or villages, is the careful oversight of the water supply, and in these days immense sums are constantly being spent in connection with this matter. For example, the city of London is now considering the question of abandoning the Thames as a source of supply, and of bringing water for its enormous population from hills many miles way. In like manner all over the world care is being taken to procure a source as pure as possible, and by means of a sometimes complicated series of filters to still further reduce the risks of impurity before it reaches the pipes for distribution. But after it has entered these it is by no means certain that it will reach the consumer uncontaminated. In some places it is doled out on what is termed the *intermittent* system; that is, each house is furnished with one or more cisterns, which are filled during the short fraction of the day in which the water is allowed to run. While this is economical in several respects from the point of view of the water company, it is accompanied by so many dangers to health that as a system it is on the decline. Thus, the water must be stored on the premises, where it is apt to absorb deleterious gases, as in water-closets, etc.; is apt to be stored in improper receptacles, and to be polluted by insects, mice, etc., besides which it becomes comparatively flat and insipid. Cisterns are safe only when frequently cleansed, when made of stone, slate, or galvanized iron, when exposed to the light and air, and covered, and when entirely disconnected directly with water-closets or drains.

While the *constant* system requires continual care of pipes and taps to prevent great waste, and may therefore be expensive, it has the great advantage that no house storage is required except in the water-closet cisterns and a small cistern for the kitchen boiler. Dangers in connection with the constant system exist where water-closets are flushed by a pipe and tap direct from the house main without the intervention of a cistern, for, when the tap is left unscrewed and the water is turned off at the main, foul liquids or air may be sucked up into the pipes and gain entrance to the water-mains. The suction is the result of leakage from the pipes (a common occurrence), which causes a partial vacuum within them. Several epidemics of typhoid fever have occurred in this manner. There is danger in the same way, when water mains and sewers are laid in one trench, that leakage from the sewers may reach the interior of the water pipes when the company's officials turn off the water for some purpose, frequently a daily occurrence.

But the dangers from these services are minute compared to those connected with the use of such shallow wells as are common in many districts, many of which are apparently unprotected at the mouth, and have walls of a porous nature. Seeing that the presence of excrementitious matter may by no means affect the palatability of water, and that a well drains an area surrounding it equal to from fifteen to one hundred and sixty times the depth of the well (depending upon the nature of the soil), it would be safe to assert that a great many persons are consuming daily such suspended or dissolved matters as would greatly disgust them did they know it. Certain it is that all shallow well water, however clear and sparkling, in the neighborhood of human habitations, is suspicious, as are many in more sparsely peopled districts, and that especially in the presence of epidemic diarrhea and enteric fever, before being drunk it should always be subjected to some process of artificial sterilization. In fact, there can be no doubt that the annual mortality figures would be considerably lessened were all waters used only in the cooked condition.

THE PREVENTION OF CHOLERA.

The beneficial effects of careful sanitary inspection and precautions against cholera are well brought out in the recent report of the medical officer of the British Local Government Board. The history of the cholera epidemics of 1848 and 1853 which reached England by the northern route, through Russia, North Germany, and the North Sea ports, was in each case that of a severe outbreak in the year following its arrival. Thus in 1848 1,105 persons died of cholera and the next year 53,293; in 1853 there were 4,419 cholera deaths, and in 1854 no fewer than 20,097. In 1892 cholera arrived in Germany by the same route, but the British government sent out a number of special medical officers who carefully investigated the sanitary condition of the country, paying special attention to the seaports, and with sufficient powers for the suppression of nuisances. Owing to the precautions taken no case occurred in England in 1892, but there were 135 deaths in 1893, a small number when we consider the greatly increased source of infection in these times of close international communication. It was feared that 1894 would see a considerable outbreak, but on the contrary, owing to the extraordinary care taken, not one death took place in that year. From the financial point of view Dr. Thorne-Thorne has been able to prove that the value of the life saved more than outweighs the expense incurred.

SANITARY CLOTHING.

The materials of which underclothing is made are principally wool and silk from the animal, and cotton and linen from the vegetable kingdom. A great deal of ignorance prevails concerning the relative advantages of these, although this forms a question of very great importance, especially in relation to children and old people.

Cotton forms non-shrinkable, smooth, and durable garments, and being comparatively non-absorbent and a good conductor of heat, rapidly becomes wet and gives off the warmth of the body, causing a chill to its surface. The new "cellular" cotton cloth is made with such space between the fibers as allows of the presence of an abundance of non-conducting air, and is, therefore, less to be condemned than the ordinary material.

Linen resembles cotton, and is even inferior as a cloth for underwear.

Wool is a more expensive material than cotton, does not wear so well, and especially when washed in too hot water and with a soap containing much soda, and when wrung out before drying, garments made of this fiber are apt to harden and shrink. Some persons object to wool next the skin as they find it irritating. But in spite of these disadvantages it makes distinctly the best underwear for both cold and warm climates. The hygroscopic power of wool, or its capability of absorbing water into its substance, is double that of cotton in proportion to weight, and quadruple in proportion to surface, while it possesses also great water-holding power between its fibers—"water of interposition." It is also a very bad conductor of heat on account of the air contained in its interstices, and because of the presence in it of an animal oil, which in new woolen fiber may compose about fifteen per cent. of its substance.

It is not during exertion, but after it, that the danger of chilling occurs. Then the skin continues to give off watery vapor which, in the case of cotton clothing, passes to the outer surface and is there evaporated, at the same time, of course, lowering the temperature. In wool, on the other hand, the vapor is condensed, during which process the heat which had been rendered latent when the perspiration was vaporized, is given back, while the wool absorbs and retains the water, remaining therefore warm and dry, and preventing chilling. In hot climates, where chilling is a frequent precursor of ague, dysentery, and diarrhea, it is quite as important that wool should be worn next the skin as it is in cold countries in which the outer garments are usually of woolen material. It is believed in some places that wool worn next the skin diminishes the risk of malaria. Malarial poison is supposed to enter the system through the lungs or stomach, and clothing can hardly interfere with that, but that is no reason why clothing should not influence the susceptibility of individuals to the poisonous influences, and practical experience in West Africa, in Rome, and in other places seems to confirm the correctness of this view.

Silk in some respects resembles wool. It is a bad conductor of heat, but it is less absorbent than wool. It is cleanly, does not shrink much, and is pleasant to the skin. It comes next to wool as a material for underwear, but is very expensive, and not very durable. A mixture of wool and silk makes comfortable and useful underwear. For exposure to cold winds and rain *leather* and *gutta-percha* are invaluable, the objection to them being the prevention of the circulation of the air (wherein of course also lies their advantage) and the resulting discomfort when the wearer perspires. This can to some extent be obviated by proper ventilation.

For protection against the direct rays of the sun *color* is the point of importance. White is the best, then follow in order grey, yellow, pink, blue, and black. In the shade one color is as good as another.

Proper clothing is specially important for children and old people. The circulation of the latter is apt to be feeble, and heat regulation, like other functions, to be inefficient. Loss of heat cannot therefore be made good with the rapidity necessary for perfect health, and consequently the vital forces may be dangerously depressed.

In children the circulation is more rapid than in adults, and the blood in a given time passes more frequently to the surface of the body, where it loses heat; but more important is the fact that the superficial area of a body of the human shape is much greater in the child in proportion to its total bulk than in the grown person. In a cube with sides of one square foot the relation of surface to bulk is six to one, while in a cube with sides of two square feet the relationship is four to one. The same is true for cylinders, which more nearly resemble the human body. The special liability of children to lose heat is therefore evident, and it follows that in them it is of particular importance that the body should be wisely clothed.

OUR DECREASING BIRTH-RATE.

Figures lately compiled and published by Dr. J. S. Billings, perhaps our best authority on vital statistics, show that the birth-rate in America is on the decline, and this fact has not failed to attract the attention of the press—lay, medical, and scientific.

In 1880 the birth-rate per 1,000 in the United States was 30.95. In 1890 it was 26.68; a decrease of 4.27 per 1,000 of population in ten years. The decrease in the different States appears to have been nearly uniform. In Maine it was 3 per 1,000; in New York 1.65; in Pennsylvania, 3.30; in Indiana, 4.70; in Kansas, 5.67; in California, 3.72; in Louisiana, 5.50; in Texas, 9.47; in Kentucky, 4.90; in Georgia, 6.50; in Virginia, 7.76; and in other States in about the same proportion. The decrease was greatest in Massachusetts—11.67.

One cause of the decrease is said to be the drifting of the population toward the cities. Another, and probably more important factor is the desire of the *fin-de-siècle* woman to enjoy to the full the artificial and acquired "functions" of society, instead of the natural and instinctive functions of womanhood. Child-bearing, with all the self-sacrifices which this truly physiological condition imposes, is indeed not compatible with cotillons, euchre parties, and receptions. Therefore it is said that "woman's vanity threatens the race."

The declining birth-rate in France is well known, and it has excited some uneasiness among that patriotic people. Recourse has been had to legislation, societies have been formed to consider and devise ways and means of holding up the birth-rate, premiums have been offered on large families, etc., but the babies are not forthcoming.

It is said that a diminishing birth-rate has presaged the decline and fall of nations, notably Greece and Rome. Is a similar destiny in reserve for France and America?

SELECTIONS AND ABSTRACTS.

SKIN DISEASES AND SYPHILIS.

EDITED BY DR. M. B. HUTCHINS.

VITILIGO.

Dr. John V. Shoemaker, in a clinical lecture at the Medico-Chirurgical Hospital (*Am. Med. Surg. Bul.*, June 6, 1896), made some general remarks upon these causes of "turning white in spots." He says it may depend upon any disorder of the nervous system, and that the effects of malaria on the blood and nervous system often bring it on. He had seen a negro girl who was white on one side of the face and black on the other. He said that probably the most decided result in a large proportion of cases is produced by central and local galvanism. "The current will so stimulate the vaso-motor nerves and so impress the ganglionic center as to excite a more symmetrical distribution of pigment." He mentions the case of a mulatto woman who was cured by this means.

This disease is one of those which it is usually difficult or impossible to cure. If galvanism succeeds a *bête noire* of the dermatologist will disappear.

THE SUPERIORITY OF THIOL TO ICHTHYOL.

Dr. G. Morgan Muren (*N. Y. Med. Jour.*, June 27, 1896), expresses his preference for thiol. "Thiol is a definite synthetic compound." Ichthyol comes from a mineral deposit rich in sulphur. (Each gets its virtues, no doubt, from the sulphur elements which they both contain—the sulphur occurring in a convenient form.) Thiol has not the odor which is a drawback in the use of Ichthyol. He says it is non-irritating, and that it has a very soothing effect upon burns. The cases which he gives are not sufficiently numerous or decisive for the formation of a verdict, but if it can be demonstrated that Thiol is even as useful as Ichthyol the former will take the place, largely, of the latter, because it has no bad odor.

We used Thiol in the New York Skin and Cancer Hospital, but did not consider it as beneficial as Ichthyol.

CHRYSAROBIN AND CHRYSOPHANIC ACID.

Dr. Walter G. Smith, in a paper read before the Dermatological Society of Great Britain and Ireland, May, 1896, went into the description of these two drugs and their action. It has been thought by many that the drugs were much alike in action and that the activity of Chrysarobin was due to its Chrysophanic Acid. (Many persons think one as good as the other.)

It is interesting to know, as these drugs constitute the best remedies for *Psoriasis* (locally applied), that actual experiments, side by side, demonstrate that Chrysarobin is far superior to Chrysophanic Acid in its action on the psoriatic lesions.

It is to be regretted that the results found by Dr. Smith were not reversed in view of his statement that good samples of goa powder, from which Chrysarobin comes, are now hard to obtain.—(From report in *British Journal of Dermatology*, July, 1896.)

A CASE OF REINFECTION OF SYPHILIS.

Dr. Howard Paxton Collings, of Hot Springs, Ark., reports this case in *Journal of Cutaneous and Genito-Urinary Diseases*, August, 1896:

The patient gave a history of chancre and secondary symptoms eight years before. History correct as to the kind of symptoms. After thorough treatment, extending over two years, he had no symptoms for six years.

"Nearly nine years" after the first chancre, and twenty-eight days after exposure, the second chancre appeared on the penis, on the dorsal surface. Six weeks later "mucous patches" appeared about the anus. Moist "spots" appeared on the scalp after two weeks more. At the end of the tenth week a mucous patch beneath the tongue. Later, one on the tip of the tongue. Dark, excoriated, moist lesions appeared on the left calf and right gluteal region in three months. General adenopathy was observed when the doctor saw him at the end of the seventeenth week.

This is one of the best defined cases of reinfection which we have seen reported.

CALCIUM CHLORIDE IN URTICARIA.

Dr. A. E. Wright reports two cases of urticaria treated by the administration of calcium chloride, having given as much as thirty grains at a dose. (*Brit. Journ. of Derm.*, March, 1896.) His theory is that these patients possess low blood coagulability, and that the drug increases it. If we can get a c. p. calcium chloride, and further experiments confirm Dr. Wright's results, we shall be the better able to control attacks of urticaria which are so troublesome in many people and so hard to manage.

PRESCRIPTIONS.

For Ringworm of the Skin:

℞ Acid. pyrogallic ....gr. xv.
Collodii ....℥ i.
M. Sig.—Paint on active spots to keep them covered.

A Simple Dressing for Chancroid:

℞ Calomel, hg. chl. mit.

OR,

Calomel, hg. chl. mit.
Bismuth, bism. subnit ....āā.
M. Sig.—Keep the sore covered with this.

A Salve for Late Syphilitic Sores:

℞ Ung. hydrarg.,
Ung. zn. ox ....āā.
M. Sig.—Keep well on.

TREATMENT OF HEMOPHILIA.

Dr. A. E. Wright, Professor of Pathology in the Army Medical School, Netley, England, has demonstrated that chloride of calcium, in twenty to thirty grain doses, continued for some time, so increases the coagulability of the blood as to arrest hemophilic hemorrhage. He has been borne out in this observation by several other surgeons. The less soluble calcium salts act in a similar capacity when applied locally, and he has used with satisfactory results a paste of powdered chalk mixed with ½ per cent. solution of calcium chloride. Dr. Wright has himself confirmed Dr. Wickham Legg's statement that hemophilic children are frequently addicted to eating plaster, mortar, and such substances.

The inhalation of carbonic acid also has the power of increasing the blood coagulability, and as the calcium treatment may not always be successful, Dr. Wright advises the combination of the two. The following is a quotation from his paper in the *Lancet*, in which he also discusses the beneficial effects of cell nucleo-albumins in arresting hemorrhage:

Administrations of carbonic acid were resorted to whenever the epistaxis recurred. The administration of the gas was invariably followed by a prompt arrest of hemorrhage. The method of administration which was adopted consisted in leading a stream of carbonic acid into the nose through an india-rubber tube passed up well into the nostril. The carbonic acid was supplied from an ordinary Kipp's gasogene, such as can be purchased at any chemical apparatus dealer's for a few shillings. The patient was directed to hold his head forward in order that the blood should run out of the nostril along the india-rubber tube instead of trickling down the posterior nares. The coagulative effect of the carbonic acid was gauged by noting the rate at which the blood dripped from the tube. On several occasions this treatment was supplemented by a previous syringing out of the nostrils with ½ per cent. calcium chloride solution. In the case of epistaxis it is not necessary that the patient should inhale the gas; the local effect of the gas at the seat of hemorrhage will suffice. The same statement would hold good of a possible treatment of metrorrhagia by an administration of carbonic acid. It is, however, necessary to insist upon the fact that an excess of carbonic acid must be avoided if the method is to be effectual. My experiments upon animals have shown that the accelerating influence of carbonic acid gas upon blood coagulation is manifested only in presence of a sufficiency of oxygen. When this fact has been realized, it becomes evident that the inhalation of carbonic acid gas would be applicable to the treatment of hemoptysis. It is not necessary that the patient should be in any degree asphyxiated. Asphyxiation would militate against the efficacy of the method. The stream of gas should first be turned on very gently, so as to induce anesthesia of the mucous membranes. As soon as this has been effected very large quantities of the gas can be tolerated without discomfort. I have not had an opportunity of testing the method in a case of hemoptysis; it would appear, however, to be deserving of a trial, for it is a method which might result in an immediate arrest of hemorrhage. If the administration of carbonic acid were not effectual by itself, its coagulative effect might be enhanced by a previous administration of calcium chloride. It might, for instance, be applied an hour after the administration of thirty grains of calcium chloride by the mouth.

Finally, before dismissing the subject of the arrest of hemorrhage, it may be well to advert to the employment of solutions of cell nucleo-albumins as local applications to bleeding surfaces. The employment of physiological styptics of this kind would appear to be especially indicated in the treatment of hemophilia, for I have convinced myself by a somewhat extensive series of observations on the blood of hemophilic families, that the blood of hemophilic patients and of their female ascendants is characterized by a notable paucity of white blood-corpuscles, and especially by a relative paucity of the polynuclear white blood-corpuscles. In other words, hemophilic blood is deficient in the cellular elements which contribute the nucleo-albuminous element to the formation of fibrin. An addition of nucleo-albumins is, therefore, essential to the formation of a sound clot. The practitioner can always readily obtain a supply of these by mincing up a thymus gland, a testicle, or (if these cannot be obtained) a piece of gastric mucous membrane, in a little 1 in 500 solution of carbonate, and by filtering off the infusion, either immediately or after the lapse of a few minutes, through a piece of calico. I have employed such solutions of cell nucleo-albumins in two cases of hemophilic hemorrhage; in both cases the hemorrhage was taking place from cuts upon the hand. The result of the application of this physiological styptic was in each case the formation of an enormous mass of clot round the wound. In one of the cases bleeding continued for days under the clot (this was no doubt due to some dislodgment of the clot), and the skin became extensively macerated. I had in this case to clear away the clots and to arrest the hemorrhage by inhalations of carbonic acid combined with an application of lime salts. It is, perhaps, not too much to say that with these three methods of arresting hemorrhage at our disposal, very few, if any, cases of hemophilia ought to be allowed to succumb to their capillary hemorrhages.

RECENT PROGRESS IN THE TREATMENT OF FRACTURES.

In the *Medical News*, July 11th, Dr. A. J. McCosh reviews the most recent methods of treating fractures. He says:

For the treatment of fractures of the lower extremities two new methods, or, rather, modifications of old methods, have been recently proposed in Europe and have already been employed to a considerable extent in the United States. Each of these possesses features of novelty and also of practical utility. Each is worthy of more extensive trial.

The first is the method of "massage and mobilization," which has been systematized and strongly advocated for the past six years by Lucas Championière. He claims that this method is revolutionary and paradoxical, and one absolutely new and contrary to the theory and practice of surgeons. Such terms are, however, extreme, for the plan is not entirely novel, though it has never before been carried into execution in such a systematic and thorough manner as is advocated by this surgeon. According to this method immobilization of the limb is avoided. Massage is begun at once—the sooner the better—and employed daily until the bones have united. The séances as a rule last fifteen to thirty minutes. At first the manipulations must be gentle, and pressure should not be made directly over the ends of the fragments. In the intervals the limb is supported merely by a flannel bandage evenly, but not tightly, applied, or by sand-bags alone. Splints or other immobilizing apparatus are not employed. The claims advanced for this method are: rapid disappearance of pain and swelling, prevention of and more rapid absorption of the edema and infiltration of the soft parts and of the effusion in the joints, preservation of muscular nutrition, and the more rapid formation of a firm callus. As a consequence the fracture is followed by but little stiffness of either muscles, ligaments, or joints, and as soon as the bone is united the function of the limb is fully restored and the patient thus saved weeks or months of pain, stiffness, and disability. In certain cases, however, the originator of this plan grants that his treatment cannot be carried out in all its details. When the mobility of the fragments is so great that there is danger of a permanent deformity, or when the ends are so sharp that manipulation is apt to produce repeated traumatisms of the soft parts, or where the vitality of the skin has been endangered on account of the severity of the injury, the use of massage should be postponed for a week or two and the limb may be even confined for a few days in splints. There can be no question but that in certain cases this plan of treatment possesses advantages over the recognized treatment by complete immobilization. For example, in fractures of the radius or of the fibula, the period of inability will probably be considerably shortened. It is not, however, a safe method to employ in every case of fractured leg. The risk of bony deformity is probably increased and it is very doubtful if either the patient or surgeon will be satisfied with a crooked limb even at the expense of a shorter and an easier convalescence. In many cases this method must prove a dangerous one, and it therefore cannot be recommended for routine practice.

The other method is the so-called ambulatory plan of treatment for fractures of the lower extremity, but especially of the leg. The method is not entirely novel, for at different times it has been used by surgeons in this city, though perhaps not in the systematic manner in which it is now practised in Holland, Germany, and in our own country. Plaster of Paris has always been largely employed in this country and has been especially popular in New York and Boston, in which cities, indeed, its use has been for many years almost universal in the treatment of fractures of the leg. The fracture-box has happily disappeared and in most of our city hospitals is not to be found in the surgical armamentarium. According to the ambulatory plan of treatment the use of the plaster splint is carried to a still greater state of perfection. It is claimed that the patient can get out of bed a few days after the accident, and can walk at the end of the first week, with the assistance of one crutch or a cane. About twelve years ago it became the custom of several surgeons in this city to encourage their patients to get out of bed as soon as possible, and often they would be able to walk on the injured limb at the end of a week or ten days. This plan, however, which only differed in a few details from the method now called the ambulatory, seemed to have fallen into disuse, in part perhaps due to the custom in our hospitals of handing over the treatment of fractured legs to the hospital interns, many of whom have habitually enveloped the limbs in rolls of cotton underneath the plaster. The ambulatory treatment as systematized at the present day consists in the use of a plaster splint snugly applied, without the use of cotton on the leg, but with this addition: that on the sole of the foot underneath the splint is placed a pad of cotton about three-quarters of an inch thick and slightly deeper at the heel. This splint grasps the leg firmly about the bony prominences, especially at the upper part of the leg and head of the tibia. The leg thus hangs suspended to a certain extent in the splint, the greater weight being borne on the bulging part of the leg below the knee, the sole of the foot being separated from the splint by the pad of cotton. The principle is the same as that taken advantage of in the use of an artificial limb, though, of course, the avoidance of pressure at the end of the limb is less perfectly accomplished. In a few cases this splint can be applied immediately before swelling has resulted. Generally, however, this is impossible, and it is then wise to delay its application for four or five days, so that it may not be rendered unserviceable by the shrinkage of the limb. The short period of confinement to bed and the preservation of muscular nutrition are the main advantages of this plan of treatment, and as a result the general condition of the patient remains good and his period of invalidism is much shortened. It is not, however, a method adapted for all cases. In a considerable number the pain is so great that the patients cannot walk; in others, the weight of the splint or timidity prevents locomotion. In some cases the shape of the upper part of the leg prevents proper support; in others the obliquity of the fragments is such that there is considerable risk of overriding and ultimate shortening; and in still others the laceration and contusion of the soft parts is too severe to warrant the early application of the splint. Experience seems to show that the ambulatory splint can be used with distinct advantage in from thirty to forty per cent. of simple fracture of both bones of the leg and in nearly all cases of fracture of the fibula. The same principle may be occcasionally employed with advantage in the treatment of fracture of the knee, though of course the apparatus must be of a different pattern.

One fact must not be forgotten in the trial of new methods—*i. e.*, that there is no class of cases, either in surgery or medicine, where the medical attendant is liable to meet unjust criticism or suits for malpractice as in cases of fractures where a perfect result has not been obtained. Caution, therefore, should be exercised in the employment of methods which have not received the general sanction of surgical authorities.

MARECHAL'S PROCESS OF PRESERVING INSTRUMENTS FROM RUST

A very small amount of alkali is sufficient to keep metal from rusting, so that if steel, iron, nickel, or copper instruments are dipped in five grams alcohol containing one or two grams of either borate, carbonate, bicarbonate, or benzoate of soda, they will not tarnish.—*Gazette Méd. de Liège,* May 14. *Quoted in Journal American Medical Association.*

MEDICAL ITEMS.

Dr. A. B. Holder, a well known surgeon of Memphis, died July 13th of acute appendicitis.

Dr. R. W. Fort has moved from Atlanta to Bainbridge, where he will be physician to a large convict camp. Our good wishes go with him.

The next annual meeting of the Tri-State (Alabama, Georgia, and Tennessee) Medical Society will be held at Chattanooga, Tenn., on October 13, 14, and 15, 1896. Dr. I. B. Murfree, Murfreesboro, Tenn., is President, and Dr. F. Trester Smith, Chattanooga, is Secretary.

Picric acid, a drachm to two ounces of alcohol and twenty of water, is highly recommended as an application by compresses to burns. The solution is commended as being soothing, antiseptic, and non-poisonous. Two or three applications at intervals of several days are usually sufficient.—*Denver Med. Times*, June.

Great caution must be observed in the use of cocaine within the urinary passages, says a writer in *Therapeutische Wochenschrift*, June 21, but the capricious action of the drug is as difficult to guard against as that of chloroform. The use of cocaine is contraindicated in anemic persons and in those that are the subjects of respiratory or circulatory disease. When cocaine poisoning occurs, amyl nitrite and chloroform should be used, also opium and chloral hydrate for the convulsions, but above all artificial respiration and injections of camphor dissolved in ether.

MR. ALVIN ASHER.—We regret to announce the death of young Mr. C. A. Asher. He was a student of the Atlanta Medical College, in his third term. Always happy and good-natured, he will be sadly missed by those who knew him.

RUBBER medical and surgical goods are said to rot so readily because of the action of the atmosphere on the rubber, changing the sulphur in it into sulphuric acid. Such goods can be preserved for a much longer period by occasional immersion in an alkali fluid.—*Denver Med. Times*, June.

The Alabama Medical and Surgical Age states that at the meeting in April next of the Medical Association of the State of Alabama, which was founded by Dr. Jerome Cochran, a proposition will be brought forward to commemorate Dr. Cochran's unselfish and philanthropic work by raising a fund to build in Selma a monument to his memory.

A DEATH CERTIFICATE.—This unique specimen of a certificate of death is said by an English contemporary to have been tendered by a native apothecary at an inquest in India: "I think she died or lost her life for want of food, or on account of starvation, and perhaps for other things of her comfortables, and most probably she died from drowning."—*Medical Record.*

We desire to remind our readers that the twentieth annual meeting of the American Dermatological Association will be held at the Hot Sulphur Springs of Virginia, September 8, 9, and 10, 1896. Officers for 1896: President, A. R. Robinson, M.D., of New York; Vice-President, F. J. Shepherd, M.D., of Montreal; Secretary and Treasurer, C. W. Allen, M.D., 126 East Sixtieth street, New York.

THE sixth annual meeting of the American Electro-Therapeutic Association will be held on Tuesday and Wednesday, September 29th and 30th, and Thursday, October 1, 1896, in Allstón Hall, the Studio Building, on Clarendon Street, near St. James avenue, Boston, Mass. The Brunswick Hotel, corner Boylston and Clarendon streets, will be the headquarters of the Association during the meeting. Terms reduced to four dollars per day, for Fellows and their friends. The Copely Square Hotel, corner Exeter street and Huntington avenue, terms reduced to three dollars per day, is also located in close proximity. For rooms, etc., apply either to the proprietors, or to Dr. W. H. White, No. 222 Marlborough street, Boston, Mass., who, as the Vice-Chairman of the Committee of Arrangements, will reserve rooms.

The *Lancet*, for June 27th, contains an account of a case of uterine hemorrhage, bringing the patient to the verge of death, which was, however, fortunately averted by the injection of saline fluid into the axillary cellular tissue. The credit for this method of treatment is due to Mr. Thomas B. Morse, of Norwich. The instrument employed is a slight modification of Mr. Arbuthnot Lane's transfusion apparatus, and an ordinary saline solution is used—a teaspoonful of common salt to the pint of boiled water, cooled down to 100° F. The steel point of the needle is thrust through the skin of the axilla deep enough to move freely in the cellular tissue, which is slowly filled with the solution, the syringe being refilled until a pint or more has been injected.

In this case the fluid was rapidly absorbed, and hardly any swelling remained at the end of two hours. The patient rapidly showed signs of improvement, and was soon able to take nourishment.

The advantages of this method are obvious, for any physician could use the instrument unassisted, and with little loss of time.

THE following law relative to ophthalmia neonatorum is now in operation in South Carolina. There should be something similar in every State: "Be it enacted by the General Assembly of the State of South Carolina, that should one or both eyes of an infant become reddened or inflamed at any time after birth, it shall be the duty of the midwife or nurse or person having charge of said infant to report the condition of the eyes at once to the local board of health of the city or town in which the parents of the infant reside; that the Secretary of State shall cause a sufficient number of copies of this act to be printed, and supply the same to health officers and health committees, whose duty it shall be to furnish a copy to each person who is known to act as midwife or nurse in the cities or towns for which they have been appointed; any failure to comply with the provisions of this act shall be punishable by a fine not to exceed $25, or imprisonment not to exceed one month, or both."

DR. LOVE announces in the *Medical News* his retirement from the staff of the Marion-Sims College of Medicine. His resignation was accepted, accompanied by expressions of appreciation and good wishes.

Dr. Love took advantage of the occasion of this announcement to state in the *Medical News* that "there are about four times as many medical colleges in every section of the country as are needed. . . . Men are holding professorships to-day in medical colleges who, figuratively speaking, are still in diapers and who wear their honors and perform their duties about as gracefully as the teething infant handles his rubber ring and his rattle. The late Professor Agnew, of Philadelphia, was an adjunct teacher for thirty years in anatomy before being made Professor of Surgery, and in him we have a noble exemplar for the whipper-snappers in swaddling clothes who form a large part of the teaching and controlling faculty in many medical colleges, and spout most vociferously in 'Varsity Vein' of higher medical education and long terms."

The third annual meeting of the American Academy of Railway Surgeons will be held in Chicago, Illinois, at the Auditorium on Wednesday, Thursday, and Friday, September 23, 24, and 25, 1896.

OFFICERS.

President.—John E. Owens, M.D., Chief Surgeon C. & N. W. Railway, Chicago, Ill.

First Vice-President.—L. E. Lemen, M.D., Division Surgeon U. P. Railway, Denver, Colo.

Second Vice-President.—F. L. Peck, M.D., Surgeon N. Y. P. & O. Railway, Clinton, N. Y.

Secretary.—Webb J. Kelly, M.D., Division Surgeon Erie Railway, Galion, Ohio.

Treasurer.— C. B. Kibler, M.D., Surgeon Erie Railway, Corry, Pa.

Editor.—R. Harvey Reed, M.D., Chief Surgeon C. S. &. H. Railway, Columbus, Ohio.

THE officers and graduates of Atlanta University are making an inquiry into the cause of the high death-rate among negroes in cities. The object of this inquiry is to secure the adoption of means for the improvement of the sanitary condition of the colored race in towns. This movement certainly deserves the cordial support of the friends of the negro.

The *Sanitarian* for June gives some alarming statistics on this subject, and it was this publication which moved the Atlanta University people to make the noble endeavor in which they are now engaged.

The *Sanitarian* shows that in Washington, where nearly one-third of the inhabitants are colored, the death-rates in 1895 are reported to have been as follows: White, 16.97; colored, 28.18.

For the disease commonly called consumption, the rates were: White, [illegible]; colored, 3.98. The rate for the entire population was 20.57, and it will be observed that the rate for white people (16.97) is low for a city of this size. In New Orleans, where nearly one-quarter of the people are colored, the rates for the month of April were 23.66 and 51.45 respectively. For the white residents of Charleston the rate was 19.36, while for the colored people of that city it was 35.86. In Baltimore the rates for April were 18.18 and 35.05, and in twenty-seven towns of North Carolina, for the month of March they were 14.1 and 25.6.

The negro death-rate in Atlanta is much lower than that in some of the cities mentioned in this list, and lower than that of the lowest given above. Still it is higher considerably than the death-rate among the whites.—*Atlanta Journal.*

OTITIS MEDIA.

Dr. Wm. Lincoln (*Cleveland Jour. of Med.*), in an able article on the complications of purulent otitis media, says: We should not "allow a purulent otitis media to progress to either a bad or a good result without attention. In other words, pus collection and discharge in and from the ear should receive not less and later, but greater and earlier attention than an abscess in other parts of the body, for the reason that it is less liable to get well without such attention, and also because the consequences of neglect are, in the general run of cases, more disastrous. In no class of cases does a patient suffer more or longer from inattention or from a mistaken conservatism of his physician."—*St. Louis Med. and Surg. Journal.*

AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

The ninth annual meeting of the American Association of Obstetricians and Gynecologists will be held at the Hotel Jefferson, Richmond, Va., Tuesday, Wednesday, and Thursday, September 22, 23, and 24, 1896.

The proprietors of the "Jefferson" offer special rates to the fellows of the association, their families, and guests, as well as to any physicians who come to attend the meeting. It is confidently expected that the railways will offer transportation at a uniform rate of a fare and a third on the certificate plan to all in attendance. Let all obtain certificates from their local ticket agents, or from the nearest point where certificates are granted.

OUTLINE PROGRAM.

The association will meet in executive session with closed doors on Tuesday, September 22d, at 9:30 o'clock A. M., for the election of new fellows. The open session for the reading of papers will begin at 10 o'clock A. M. Recess for luncheon 1 o'clock P. M. Afternoon session at 3 o'clock P. M. An evening session will be held Tuesday at 8 o'clock.

Morning session will begin Wednesday at 9:30 o'clock for the reading of scientific papers. Recess at 1 o'clock. Afternoon session at 3 o'clock. Adjournment at 5 o'clock. Executive session at 6:30 o'clock. Annual dinner at 8 o'clock P. M.

Tuesday morning the session will begin at 10 o'clock. Recess at 1 o'clock. Afternoon session at 3 o'clock. Final adjournment at 5 o'clock. A full attendance is specially requested at the final session.

PAPERS PROMISED.

NOTE.—No attempt is made to arrange papers in the order in which they are to be read. That will be done in the permanent program.

1. Principles and Progress in Gynecology. President's address. Joseph Price, Philadelphia.

2. Vaginal Hysterectomy by the Clamp Method, Sherwood Dunn, Los Angeles.

3. Further Experience with Appendicitis, A. Vander Veer, Albany.

4. Relation of Malignant Disease of the Adnexa to Primary Invasion of the Uterus, A. P. Clarke, Cambridge.

5. Treatment of Puerperal Septicemia, H. W. Longyear, Detroit.

6. Treatment of Posterior Presentation of the Vertex, E. P. Bernardy, Philadelphia.

7. Relation of Local Visceral Disorders to the Delusions and Hallucinations of the Insane, W. P. Manton, Detroit.

8. Differential Diagnosis of Hemorrhage, Shock, and Sepsis, Eugene Boise, Grand Rapids.

9. Movable Kidney; Local and Remote Results, A. H. Cordier, Kansas City.

10. Pathology and Indications for Active Surgical Treatment in Contusions of the Abdomen, W. G. Macdonald, Albany.

11. Some Causes of Insanity in Women, George H. Rohé, Sykesville.

12. Subject to be announced, John Milton Duff, Pittsburg.

13. Shall Hysterectomy be Performed in Inflammatory Diseases of the Appendages? L. H. Dunning, Indianapolis.

14. Subject to be announced, Rufus B. Hall, Cincinnati.

15. Subject to be announced, George Ben Johnson, Richmond.

16. Dynamic Ileus, with Report of Cases, J. W. Long, Richmond.

17. Faradic Treatment of Uterine Inertia and Subinvolution, Charles Stover, Amsterdam.

18. A Plea for Absorbable Ligatures, H. E. Hayd, Buffalo.

19. Treatment of the Stump, J. F. Baldwin, Columbus.

20. Limitations in the Teaching of Obstetrics and Gynecology as Determined by State Medical Examining Boards, William Warren Potter, Buffalo.

21. Subject to be Announced, Walter B. Chase, Brooklyn.

22. (*a*) The Philosophy of Drainage; (*b*) Treatment of the Pedicle in Hysterectomy or Hystero-Myomectomy in the Abdominal Method, Geo. F. Hulbert, St. Louis.

23. Removal of the Uterine Appendages for Epilepsy and In-

sanity; a Plea for its More General Adoption, D. Tod Gillaim, Columbus.

24. Albuminuria of Pregnancy, A. Fr. Eklund, Stockholm.

25. Subject to be announced, Lawson Tait, Birmingham.

26. Unnecessary and Unnatural Fixation of the Uterus and its Results, James F. W. Ross, Toronto.

27. Sarcoma of the Urethra, Charles A. L. Reed, Cincinnati.

28. Appendicitis as a Complication in Suppurative Inflammation of the Uterine Appendages, L. S. McMurtry, Louisville.

29. Gunshot Wounds of the Abdomen with the New Gun, J. D. Griffith, Kansas City.

30. Subject to be announced, Walter B. Dorsett, St. Louis.

31. Subject to be announced, W. E. B. Davis, Birmingham.

32. Subject to be announced, E. Arnold Praeger, Los Angeles.

33. Tubo-Ovarian Cysts with Interesting Cases, A. Goldspohn, Chicago.

34. Obstruction of the Bowels Following Abdominal Section, Geo. S. Peck, Youngstown.

35. Memorial of Dr. Hiram Corson, Traill Green, Easton.

Correspondence is pending concerning additional papers. All titles must be offered before August 25th, when the permanent program goes to press. The executive council directs attention to the following by-law:

PAPERS.

VI. The titles of all papers to be read at any annual meeting shall be furnished to the secretary *not later* than one month before the first day of the meeting.

No paper shall be read before the association that has already been published or that has been read before any other body.

Not more than thirty minutes shall be occupied in reading any paper before the association.

Abstracts of all papers read should be furnished to the secretary at the meeting.

All papers read before the association shall become its sole property if accepted for publication; and the executive council may decline to publish any paper *not handed to the secretary complete* before the final adjournment of the annual meeting.

Dr. George Ben Johnson, 407 E. Grace street, Richmond, Va., is chairman of the committee of arrangements, who should be addressed in regard to hotel accommodations and railway fares.

JOSEPH PRICE, President.

WILLIAM WARREN POTTER, Secretary.

CÆSAREAN SECTION.—Readers will be interested in the perusal of Dr. Allred's description (see p. 452) of his operation for Cæsarean Section; and whether or not they may concur in the choice of such procedure under the circumstances, they will certainly be inclined to heartily congratulate the patient and him on the successful issue of what must be looked upon as one of the most extraordinary abdominal sections on record.

ABOUT COCAINE.

Following is a summary of an interesting paper on the "Rational Use of Cocaine in Surgery." (Dr. C. A. Dundore, *Medical and Surgical Reporter*):

1. The use of cocaine in surgery should not be abandoned because its irrational employment has produced deleterious results.
2. Always make a thorough physical examination of the patient before injecting the drug.
3. It should not be used in cases showing organic disease of the brain, heart, lungs, or kidneys, or in persons of a neurotic diathesis.
4. Children bear it fully as well as adults.
5. The patient should always be placed in a recumbent position prior to its employment.
6. Constriction should be used, whenever possible, to limit the action of the drug to the desired area.
7. Use a freshly prepared solution for each case.
8. Distilled water is to be employed, to which phenic, salicylic, or boric acid is to be added.

9. A two per cent. solution has a better effect and is safer than stronger solutions.

10. Never inject a larger quantity than 1⅛ grains when no constriction is used.

11. About the head, face, and neck, one-third grain may never be exceeded.

12. When constriction is possible, the dose should be as large as two grains.

13. Every slight physiological effect is not necessarily to be taken as cause for alarm.

14. Cocaine *does* have effect on inflamed tissues.

15. In case alarming symptoms threaten, use amyl nitrite, strychnine, digitalis, ether, or ammonia.

INCOMPATIBLE WITH ANTIPYRIN.

According to the *Phar. Centralblatt* the following substances precipitate antipyrin from aqueous solution: (1) Phenic acid in concentrated solution; (2) tannin and tannic acid preparations; (3) tincture of iodine; (4) chlorides of mercury. The following decompose antipyrin when triturated with it in a dry state: (1) calomel, forming a toxic combination; (2) beta-naphthol; (3) chloral, which forms an oleaginous liquid; (4) bicarbonate of soda (an acetic ether odor is given off); (5) salicylate of soda, also forming an oleaginous liquid; (6) the salts of quinine and caffein, of which the solubility is increased by antipyrin.—*New York Medical Record.*

SYPHILIS AND LOCOMOTOR ATAXIA.

Erb (*Berliner klinische Wochenschrift*, No. 11, 1896) makes a statistical report regarding the etiological bearing of syphilis on locomotor ataxia. He excludes women and persons of the lower classes, and reports 200 cases of tabes affecting men of the upper class, of whom 185—92½ per cent.—had a history of previous syphilitic infection; 61½ per cent. had positive secondary symptoms; 31 per cent. chancre without apparent secondary manifestations. Of the fifteen not infected, eleven had suspicious histories: repeated attacks of gonorrhea, strictures, buboes, miscarriage of wife, leukoplakia, syphilis of the father, etc. Of 200, only four were "absolutely now syphilitic," if one can so speak. Adding these 200 to a series of 500 previously reported, his statistics are, 90.35 per cent. of 900 cases of locomotor ataxia with syphilitic history, 9.65 per cent. without such history.—*University Med. Magazine*, June.

DESCENDING OPTIC NEURITIS CONSEQUENT UPON NASAL TREATMENT.

Temporary amblyopia and narrowing of the field of vision, apparently reflex or combined with hyperemia of the eyeball, following the application of the galvano-cautery to the nasal mucous membrane, have been reported by a number of observers. A. Alt, St. Louis, reports (*American Journal of Ophthalmol.*, vol. xii., No. 9) a case of a somewhat different and more serious nature.

A man, aged thirty-eight years, had been treated for nasal catarrh and narrowing of the left nasal passage by means of different applications and the galvano-cautery. He noticed the left eye did not see so well as usual, and mentioned it to his physician. Treatment was persisted in, and two days later he awoke to find the eye blind. When seen that day by Alt there was doubtful perception of light, the pupil was dilated and scarcely reacting. The margins of the optic papilla were almost invisible, the retinal veins were hyperemic, the arteries thin. Tension was normal.

The nasal treatment was stopped. On the third day the patient counted fingers at one foot, and on the sixth day at five feet, with considerable increase of the field. A few days later injections of strychnine were commenced, and by the eighteenth day he had regained vision = 20/xxx+, the field being still somewhat narrowed except upward and outward. The arteries were still thin, and papilla almost white.

Afterward Dr. Alt learned that the patient had had syphilis, and he thinks that to this was in some measure due the severity of the attack; but that it could only be accused of being an indirect cause of the trouble by rendering the patient more vulnerable, since only the eye on the affected side was involved, and it improved promptly on mere cessation of the nasal treatment.—*American Journal of Medical Science*, May, 1896.

BOOK REVIEWS.

MERCK'S 1896 INDEX. "Encyclopedia for the Physician and Pharmacist." Second edition, pp. 268. $3.00.

This "index" contains all necessary information concerning chemicals and drugs used in medicine, in chemistry, and in the arts. It is a useful book, especially for those desirous of obtaining information upon the composition and actions of the newer drugs.

GRANDE LIBRAIRIE MÉDICALE A. MALOINE. Place et Rue de l'École-de-Médecine, 21-23-25. Paris. **DES ANGINES COUENNEUSES NON DIPHTÉRIQUES.** Considération sur la Pathogénie, le Diagnostic et le Traitement par le Docteur Dufaud, Médecin-Major de 2^{e} Classe. 1 Volume in-18. 1 Fr. 50.

This little volume of rather more than 100 pages, including an account of twenty-eight cases and a bibliography, is written with the intention of assisting practitioners in the diagnosis of diphtheria and the diseases of the throat, which resemble it, especially when a laboratory examination is hard to obtain. Treatment is also considered. The book is worth reading.

"**GRAY'S ANATOMY.**" Published by Lea Brothers, 706–710 Sansom street, Philadelphia.

The profession will be interested to know, that there will shortly appear a new edition of this work, with which is bound up, in the mind of nearly every physician who uses the English language, memories of many days and nights of anxious reading, and many hopes and fears as examination days drew nigh; that the old familiar pages have been further embellished by 135 new engravings; that part of the book has been rewritten, and that it now possesses the—to the mind of the student—somewhat terrible advantage of seventy-five new pages.

MOODY'S MAGAZINE OF MEDICINE.

Another monthly medical journal has been launched in Atlanta. It is edited by Dr. R. H. Bell; Mr. J. T. Moody is the President and Business Manager, and Mr. J. J. Disosway is Vice-President and Treasurer. This magazine is unusual in several of its features. It publishes illustrations and biographies of some of its contributors, along with a picture called a "Lazy Day," which has a bearing on medicine inasmuch as it represents a striking specimen of feminine anatomy; and a picture of a railway president. It aims also at being political, and takes up the cause of Cuba; and commercial, containing paragraphs in connection with haberdashery, tobacco, etc. Poetry adds sentiment to its pages; while it contains departments intended for feminine perusal, and the insertion of short stories. In the first issue the tale is termed the "Moonshiner's Daughter," and is written by Lottie George. A couple of pages are devoted to a description of a fishing excursion and color photography. Still another link with the non-medical world is found in the "Railway Official Department," in which we have articles on the financial statement of the Atlanta and West Point and Western Railway of Alabama, on the railroad as an industrial factor, and on railway promotions.

While holding out the hand of fellowship to all medical journals tending to the benefit and elevation of our profession, and heartily commending the scientific papers in this special magazine, we, in no carping spirit, and considering only the dignity of the profession, venture to express a doubt as to the propriety of the above departures from conservative medical journalism.

THE AMERICAN ACADEMY OF RAILWAY SURGEONS: Report of the Second Annual Meeting Held at Chicago, Ill., September 25, 26, 27, 1895. Edited by J. Harvey Reed, M.D., Columbus, Ohio.

This book, of some two hundred pages, contains, besides the general proceedings of this meeting, the papers read there. It is well illustrated and printed, and should be valuable to those interested in the accidents incident to railway traveling.

IN SICKNESS AND IN HEALTH. A Manual of Domestic Medicine and Surgery, Hygiene, Dietetics, and Nursing. Dealing in a practical way with the problems relating to the maintenance of health, the prevention and treatment of disease, and the most effective aid in emergencies. Edited by J. West Roosevelt, M.D., late Physician in Charge of Seaton Hospital for Consumptives; Visiting Physician to Bellevue Hospital, and Attending Physician to Roosevelt Hospital, New York. Complete in one volume of over a thousand pages, illustrated with four colored plates and numerous engravings. Full analytical index. *Sold by Appleton, 205–207, Gould Building, Atlanta.* Price, $6.00, in handsome cloth binding. D. Appleton & Co., publishers, 72 Fifth avenue, New York.

A great part of this book is heartily to be commended. The article on "Anatomy," by Dr. G. W. Crary, is well written and abundantly illustrated; this is true also of the article on "Physiology," by Frederic S. Lee, Ph.D. Under the title of "Psychology," Professor Royce, of Harvard, has contributed an interesting and very readable paper dealing with the "Mind in its Various Aspects and Processes"; while W. J. Sears takes up the study of "Muscular Exercises," and, with the help of illustrations, discusses the comparative value of the various outdoor and indoor games in their relation to age and sex, country and town. This also is an excellent paper.

Among the most valuable parts of the book is that dealing with "Hygiene," by Dr. S. T. Armstrong, of New York. This is a part of medicine which is not studied nearly enough by the laity, and if they would discontinue reading and thinking about pathology and treatment and take an interest in preventive medicine, we should have fewer pale and sickly children, a diminution in contagious disease, and a general betterment in our sanitary surroundings.

It is with the latter part of the book, except the section on "Nursing" which should properly be included in a medical book for non-professional readers, that we have some fault to find. We believe in a knowledge of physiology for all, but we do not believe in endeavoring to teach the symptoms, pathology, prognosis, and treatment in surgical, medical, and obstetrical cases to any except those who are studying professionally. This does not mean that anything but good is likely to accrue from properly conducted "ambulance lectures," where first aid to the sick and wounded is taught, but when four hundred and seventy pages are given over to sections on surgery, diseases in general, and diseases of the various organs separately, and incorporated in a book intended for the general reader, it looks to us as if an attempt were being made to crown an edifice with very insufficient foundations—to teach in one book what it takes, or should take, the real student years of hard study to acquire. The inevitable result of the possession of this book by women especially, will be to increase the number of that very unpleasant race of beings who, knowing nothing properly, think they know everything medical, and are a danger both to themselves and others.

It is true that advice to call in a doctor is thickly interspersed throughout these pages, but that does not take away from the fact that the outcome of their perusal is likely to have quite the opposite effect. With this somewhat important defect, which, however, will rather increase than diminish its sale, the book is a most excellent one. The illustrations are good, and the printing large and clear.

A SYSTEM OF SURGERY. By American authors. Edited by Frederic S. Dennis, M.D., Professor of the Principles and Practice of Surgery, Bellevue Hospital Medical College, New York; President of the American Surgical Association, etc., assisted by John S. Billings, M.D., LL.D., D.C.L., Deputy Surgeon-General, United States Army. Complete in four imperial octavo volumes, containing 3652 pages, with index, 1585 engravings and 45 full-page plates in black and colors. Volume IV., 970 pages, 441 engravings, and 23 plates. Price per volume, $6.00 in cloth; $7.00 in leather; $8.50 in half Morocco, gilt back and top. For sale by subscription. Full circular free to any address on application to the publishers, Lea Brothers & Co., Philadelphia.

The subscribers to this excellent system of surgery will welcome volume IV which has recently come from the press. In it Dr. Maurice H. Richardson, of Harvard, writes on the Surgery of the Stomach and Intestines, the use of the Murphy Button, Dennis Plates, etc.; McBurney, of New York, on Appendecitis; Lusk, on Symphyseotomy; W. W. Keen, of Jefferson, on the Röntgen Rays; F. S. Dennis, on Tumors; W. T. Bull, on Hernia; L. S. Pilcher, on the Surgery of the Alimentary Canal; Robert Abbe, on the Surgery of the Liver; W. M. Polk, on Diseases of the Uterus; J. T. Johnson, on the Surgery of the Ovaries and Tubes; H. C. Coe, on Minor Gynecological Surgery; Robert F. Weir, on the Surgery of the Thyroid Gland; and R. Matas, on the Surgical Peculiarities of the Negro.

These names speak for themselves. The illustrations, many of which are colored, are numerous, clear, very carefully and beautifully executed, and aid greatly in completing the value of this most excellent volume, which we have pleasure in highly recommending.

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ATLANTA
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ORIGINAL COMMUNICATIONS.

THE NON-OPERATIVE TREATMENT OF URETHRAL STRICTURES.*

BY FRED C. VALENTINE, M.D.,
NEW YORK.
(Genito-Urinary Surgeon, West Side German Dispensary, etc., etc.)

It will, doubtless, appear at once, that the title of this paper is essentially a misnomer, as every instrumental invasion of the urethra is necessarily a surgical operation. It being such, too much care cannot be bestowed upon its details.

This paper, being intended for general practitioners, will be guided from the more intricate and abstruse special considerations.

In the very onset, to be just to the principles that in practice have stood the test of time, indiscriminate cutting of strictures must be emphatically reprobated. Growing experience gives daily conviction that the non-operative, or better, "bloodless" method so ably worked out by Oberlaender and his followers, principally Kollmann of Leipzig, Wossidlo of Dresden, and others, is the really correct manner of treating the vast majority of strictures.

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*Read before the New York County Medical Society, May 25, 1896.

While desiring strictly to limit myself now to the question of treatment, I am obliged to touch very lightly upon a few other elements, to make clear the rationale of the subject.

Etiology.—Posner [1] says: "The development of cicatricial tissue and the resultant contraction of the urethral canal, plays a most important part among the sequelae which may attend chronic inflammation of the lower urinary tract." As this development of cicatricial tissue proceeds imperceptibly, it is evident that its treatment must be associated with the treatment of its cause.

Prophylaxis.—Accepting the above etiology (we are not now considering traumatisms, malignant or benign neoplasms, or any other cause), the prevention of stricture manifestly lies in rational treatment of urethral inflammations, acute and chronic. *(Posner, ibid.)*

Classification.—For the present purposes it will suffice to grossly classify the subject, into soft strictures, most developed hard infiltrates (Oberlaender), and spasmodic strictures. The more correct, detailed divisions would be in place in a paper for genito-urinary specialists.

We may, for the present, call strictures soft, at the initial stages of their development; most developed hard infiltrates, as their name conveys. They are the extremes, as far as concerns the constitution of strictures.

Spasmodic strictures are differently viewed by the authorities. Some entirely deny their existence; among them Posner *(ibid.)* says: "Spasmodic strictures, erstwhile often assumed, consist partly in the imagination of unskilled physicians and partly belong into the domain of the neuroses." It would seem that while neurotic strictures last, they are strictures to all intents.

Otis [2] says: "The presence of a contracted meatus urinarius or a stricture of large caliber, often unnoticed, is capable of exciting chronic spasmodic closure of the membranous urethra, quite indistinguishable from true organic stricture. . . . ."

Wossidlo [3] generalizes as follows: "Stricture conveys to me the impassability of any part of the urethra by a bougie which penetrates the meatus smoothly."

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[1] "Therapie der Harnkrankheiten." Berlin, 1895.

[2] Stricture of the Male Urethra, 1880 (page 302).

[3] Zur Dilatationsbehandlung der Harnrohren-Stricturen.—*Berliner klinische Wochenschrift*, No. 6, 1896.

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This is the practical aspect with which we have to deal.

The symptoms and course of urethral stricture, if here discussed, would lead far beyond the confines of a paper on treatment.

Diagnosis.—The vast majority of strictures can be located and measured successfully only by the soft bougie-a-boule. The form I prefer is that with a rather abrupt shoulder, which catches readily in the stricture, as it is drawn out of the urethra. I have, however, seen some very fine strictures, which were so soft and of such large caliber that they did not become apparent except by the urethroscope.

Treatment.—Wossidlo *(ibid.)* sums up the current treatment of strictures with sounds as follows:

" . . . Elastic bougies are used, increasing one number at each sitting. . . . When 18 or 29 F. is reached, metal sounds replace the rubber bougies. . . . It is generally deemed sufficient when the number is reached that will pass a not abnormally contracted meatus. Most cases are considered cured when 23 to 25 F. can be easily introduced. They are then discharged, with the advice to prevent recontraction by passing sounds."

But this is by no means curing a stricture. As I said before, strictures have come under my observation, that were revealed only by the urethroscope. If unnoticed, they would have followed nature's rule and contracted, imperceptibly perhaps, until much suffering and great danger became inevitable.

Manifestly, then, the only true scientific guide to the diagnosis, treatment and final discharge of a case of urethral stricture, is the urethroscope.

As soon as a stricture is sufficiently dilated to allow an adequately wide tube to enter it, the diseased region should be examined with the urethroscope. Many cases which permit 24 to 25 F. to pass easily and are discharged as cured, by no means show a healthy urethra.

It is just this readiness to dismiss cases when all discharge and other symptoms have ceased, that causes so much havoc. I have discussed this in a paper on the marriage of gonorrheal patients.[1]

The need of a better understanding of stricture and its congener, chronic urethritis, is made painfully manifest through a case which recently came under the observation of my assitant, Dr. W. E. de Salazar. The patient, who had been treated for gonorrhea by a general practitioner of more than average good repute, complained of a thick, greenish-yellow morning drop. His medical adviser told him that the drop was of pathological import equal to the mucus he hawked from his throat every morning!

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[1] When May Gonorrheal Patients Marry ?—*American Medico-Surgical Bulletin*, Oct. 1, 1896.

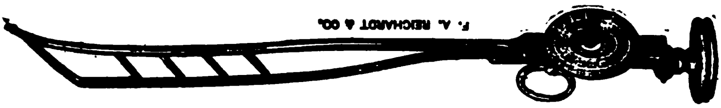
If a good practitioner will treat the morning drop so lightly, it is small wonder that so little heed is paid by patients to shreds, flakes, filaments and granules in the urine. But all this shows the need of a better understanding of the treatment of stricture, one of the causes of the above manifestations.

An outline of the "bloodless" treatment of stricture may now be offered.

Those strictures which barely permit the passage of a filiform bougie, naturally tempt one to think of external urethrotomy. But it is remarkable how rapidly most of such extreme narrowings will yield to the fine sounds (Gouley's or Banks). Until these can be followed by a small rubber catheter, it may be necessary to relieve the bladder by tapping or aspirating through Retzius's space.

Once that a fine catheter has entered, it should be fastened there and plugged, with orders to evacuate every 3 or 4 hours or oftener, according to the conditions of the urine. Twenty-four hours later the catheter will be found lying loosely in the urethra, and may be easily replaced by one a number or two larger. I have distinctly in mind a case treated by Wossidlo, in Berlin, in which I assisted him. In nine days' time four filiform strictures so yielded that they easily admitted a 20 F.

When, however, 17 F. is reached, the case may be well managed with metal sounds. As regards the shape thereof, I always use that designated by Benique. All physicians who have used them, and patients who have had them introduced, will prefer them to all other forms. Lying as they do in the physiological curve of the urethra, they exercise dilatation without traction upon the canal.



Oberlaender Dilator for the Anterior Urethra.

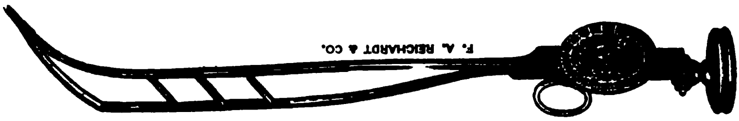
When, however, the limit is reached, which will pass the normal meatus smoothly, we must either slit it or proceed to other means of dilatation. Slitting the meatus, simple as it is, will oftentimes fail us, principally because we cannot, without making a gross hypospadias, slit it large enough to permit passing a sound sufficiently large to exercise the requisite amount of pressure upon the contracture. Thus it will be well, before proceeding to this mutilation, to give heed to the teachings of Oberlaender.

Oberlaender's dilators, as well as Kollmann's, give us an armamentarium which, if carefully employed, enable us to cure perhaps 99 per cent. of all strictures. I say this advisedly, mainly as the result of not a small personal experience.

The method of using these dilators is exceedingly simple and, when properly executed, need not give the patient any pain. For convenience and other reasons, I have slightly modified the technique of their employment.

Holding the closed dilators in the right hand, the point is made to dip up as much powdered talcum as possible. Then the rubber cover, previously rendered aseptic by scrubbing and washing in a solution of creolin or lysol and dried, is slipped over the dilator.

The rubber cover then being lubricated it is carefully passed through the stricture and dilatation very gradually begun. When the first slight resistance is felt, the dilator is left in the urethra for five minutes. Then an intravesical irrigation without a catheter is made my means of the apparatus devised for the purpose. [1]



Oberlaender Dilator for the Anterior Urethra and Bulbous Portion.[2]

If at the first sitting, the first intra-urethral resistance was felt at 20 F., the second sitting, usually a week later, will show no resistance at that number. The surgeon, as well as the patient, will then be tempted to increase the dilatation up to the next appreciable resistance. Experience has proven this unwise. A *debridement*, tearing perhaps of the stricture, and certainly of the mucous membrane, results. This heals by cicatrization, with coincident increase of urethral contraction. It is never well, except perhaps in the beginning, to increase over one number at each sitting, and then never over two numbers.

Later on, when the urethroscope shows that the stricture is getting markedly less, the weekly intervals may be increased to ten days, two weeks, and gradually to four weeks. As the intervals increase, the increase of each dilatation should be reduced to half a number or even less, but each sitting prolonged. The longest sitting that can be borne with comfort, even in hot weather, is 45 minutes. It will then be found that a dilatation which made the urethra fit quite snugly on the dilator will make it lie very loosely about the instrument.

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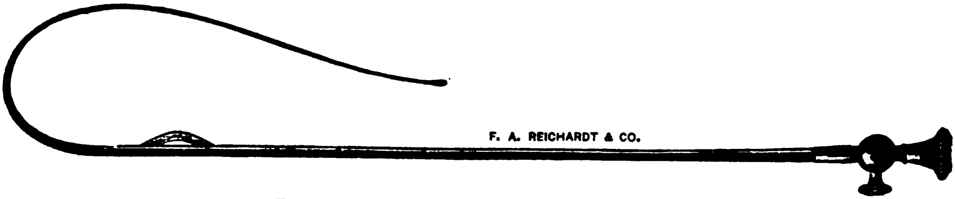
[1] Technique of Urethral and Intravesical Irrigations.—*Clinical Recorder*, February, 1896.
[2] Kollmann's four-branched dilators were depicted in the *Clinical Recorder* for April, 1896.

In the beginning of treatment each dilatation is followed by quite a copious discharge of mucus, pus, and epithelium, with bacteria. At least, this is the experience of others and was mine, until I followed each sound and each dilator with an intravesical irrigation of potassic permanganate, 1 to 6,000, or of boric acid, 2 per cent. Since then, now fourteen months, few of my patients, private or dispensary, have had any more than a very slight discharge, and most of them none at all, after ingression of any kind into the urethra.

In cases which previously had "catheter-fever" I wash out the urethra with the same apparatus, and having ascertained the capacity of the bladder, I fill it one-third or one-half with either of the above solutions. Leaving the fluid in the bladder, while the dilator is used and washing afterwards in the same manner, has never been followed by "catheter-fever," even in the most susceptible cases.

I formerly followed Wossidlo and others in cocainizing the urethra before instrumentation. Careful observation, however, has led me to desist therefrom, as the patients complained of considerable pain for hours after the anesthesia had worn off. I now use cocaine only in cases of urethral hyperesthesia. This soon yields; then I abstain from it altogether.



FORT'S INSTRUMENT FOR LINEAR ELECTROLYSIS.

Recently Prof. Fort, of Paris, demonstrated his method of linear electrolysis in very deep and tight strictures, at Bellevue Hospital and other places. Prof. R. W. Taylor speaks in no scant praise of Fort's method. My observations on its use are limited, but shall be the subject of a future paper. If my success equals that of others, I shall certainly use it before beginning dilatations, with a view to gaining time.

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But slight mention has been made of the treatment of acute retention of urine, due to stricture. Hot sitz-baths and opium will often render tapping or aspiration unnecessary, and where many efforts at passing a catheter have failed, the next endeavor is frequently followed with surprising success.

True, there are cases in which the emergency demands urethrotomy; but they are so exceedingly few in number, that they may safely be called exceptional.

In this connection Taylor [1] says: "The trend of thought as regards the treatment of urethral stricture of late years has been so unswervingly toward cutting operations, that many surgeons are wholly unaware of the beneficent and lasting effects of gradual dilatation. I have many times been pleasantly chaffed, and even mildly derided, about my conservative views as to the treatment of the male urethra when the seat of contractions; but after a not inconsiderable experience, stretching over a period of twenty-seven years, I am to-day more than ever convinced that cutting operations should be a last resort, and that intemperate incisions and over-stretching are very frequently the cause of never-ending suffering and inconveniences."

The advocacy of Oberlaender, Kollmann, Wossidlo and many others, indorsed by so eminent an American authority, takes what may appear like temerity, from my striving to stay the way of the knife into the urethra.

SANITARY REGULATIONS AND PREVENTION OF TUBERCULOSIS.

BY KATHARINE R. COLLINS, M.D.,
ATLANTA, GA.

The demonstration, beyond any reasonable doubt, that tuberculosis is of microbic origin and its classification as an infectious disease, together with the knowledge of how infection is brought about, has placed it on the list of preventable diseases; but calling it a preventable disease does not mean that it can, under the existing circumstances, be completely stamped out, but it does mean that constant effort toward the one end will diminish the death-rate, which is higher than that from any other one disease.

The Imperial Health Officer of Berlin claims that he has found one out of every third person, between the ages of 15 and 60 years, examined by him, suffering from some form of this malady. The United States claims one-seventh of the total number of deaths from it, and Michigan alone, loses fifty thousand yearly out of a population of something over one million people.

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[1] Pathology and Treatment of Venereal Diseases, 1895.

We have shown ourselves able to prevent cholera from entering this country; we have reduced the dangers of contagion from smallpox to a minimum. So why not limit the spread of tuberculosis, which is just as disastrous as either of the above in its results?

In this matter the medical profession cannot proceed alone, but good and effective legislation is necessary to control this disease, and here lie the greatest difficulties.

The medical profession, because it cannot always make plain its facts to a mind unprepared, is too often accounted a profession of theories, and more especially is this true where these theories call for a radical change in the old order of things. People do so dislike being disturbed, and unless facts can be demonstrated with spectacular effect they will not realize the necessity for action. So the only way to reach them is by force.

It is to the law that the medical profession must look for aid in this matter. So efforts should be made to instruct the law—a difficult task I will admit—but easier than the education of the masses, which will not be accomplished for many years. When thesmallpox, diphtheria, and scarlet fever epidemics made such frightful ravages among us, the profession did not wait to educate the laity, but appealed to the law. People are just as ignorant, and would be just as careless to-day in these epidemics, were it not for the sharp eyes of the board of health; and every board knows that were it not invested with authority by the law, it would not be permitted to flag or disinfect houses where any one of these diseases existed.

Now it is only in degree that any difference exists between the sanitary treatment of the very actively infectious diseases and tuberculosis, excepting, perhaps, that the latter we have, like the poor, always with us. Some of the most important rules to be followed in fighting this disease cannot be carried out until we can get the co-operation of the law, but until that time we must, as individuals, enforce as many of them as practicable.

One of the first things to accomplish is: Prompt and complete destruction of effete material containing this germ.

2. To secure a supply of pure water, food, and milk for the people.

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3. Report of all cases to the board of health.

4. Isolation of the patient during the stage when infection is liable. Thorough disinfection after death of room occupied by patient.

5. Regulations governing the building of houses for renting purposes.

6. Better laws regarding marriage.

7. Disposal of emigrants, suffering from this disease, upon landing in this country.

First. The destruction of effete material, etc.

Since the dried sputa from patients with pulmonary tuberculosis blown about by the wind is the most common method of infection, the pollution of public highways, buildings, conveyances, etc., by the promiscuous deposit of sputum should be made an offense punishable by law. The city should provide cuspidors, placed at proper intervals, containing an antiseptic solution; these should be cleaned twice a day and the contents destroyed.

Handkerchiefs used by phthisical patients should be burned; all clothing that cannot be washed should be frequently disinfected. All linen, as soon as discarded, should be placed in water containing bichloride of mercury or carbolic acid, preferably the former, and should not be put in with the family laundry, but should be washed separately. The room occupied by the patient should be disinfected by the health officer at least once in two months during the illness and thoroughly after death.

Next we have the supply of pure food, milk, and water. To secure this each State should have a fully equipped hygienic laboratory. The head of this laboratory should have charge of the examination of applicants for the positions of inspectors, said applicants being recommended by him to the appropriate civil body for appointment. These inspectors should take their instructions from the laboratory authorities, to whom they must make reports from time to time, and must send such samples of food, water, and milk as are deemed necessary, for both chemical and bacteriological examination.

All cattle should be tested for tuberculosis. All cattle-sheds and buildings on the premises, used as dairies or slaughter-houses, should be inspected.

The utensils, the methods of cleansing them, the means of conveying the milk or meat to the depot of distribution, and also, the condition of this depot to be looked into.

The source of the water supply, with its methods of filtration, and reservoirs, the ice factories, manufactories of canned goods, and the vegetable market should all come under the closest inspection.

Persons desiring to go into such businesses should make contracts with the city to furnish a pure article, and where fraud or carelessness is detected the municipal government should immediately take it up and investigate, and the proper penalty be exacted.

We come now to the duties of the board of health. This board should require every case of tuberculosis to be reported as soon as diagnosed. This refers, of course, to those cases that are sufficiently advanced for infection to take place. The board should then see that the patient is placed under the proper restrictions at home, or sent to the hospital, which should be provided for such cases. It would be well for the board to have printed leaves, setting forth explicitly all precautions to be observed by the patient and attendants. I have already mentioned the disinfecting of the room occupied by a phthisical patient during life and after death.

Fourth. Isolation of the patient.

On account of the chronicity of the disease this cannot be accomplished in the strictest sense of the word, nor would it be right to cut such a patient off from all communication with his own people, but by proper care much can be done to lessen the danger to others. The patient should occupy a room alone; this should be insisted upon.

This room should contain as little furniture as possible, and it should be very simple in kind. All hangings and rugs should be of such material as can be washed or destroyed. The floor should be bare, the cracks filled, then painted and varnished. The walls should also be painted and varnished, and where practicable should be so ceiled as to have no acute angles. As to the bed, blankets and not comforts, should be used, the mattress and pillows should have an extra covering of heavy sheeting, which can be easily changed, and washed. All vessels, utensils, and dishes used by the patient should be cleaned and disinfected apart from those used about the house. Persons spending much time in this room should always wear clothing that can be washed and this should be changed when mingling with the family.

The patient may go among a few people for short periods of time; he should always, on such occasions, put on clothing that has been disinfected. He must avoid crowds and should not be allowed in schoolrooms and similar places; he should not be employed in dairies, slaughter-houses, etc., nor where many employees work together.

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The day may not be far off when all cities will follow the lead of Berlin and New York in regulating the building of houses for renting purposes. These two cities now require for each apartment a certain amount of light and air; they prohibit the use of basements for living-rooms, and limit the number of persons that may occupy one apartment. Also, in time, parties may be required to show a clean bill of health before procuring a marriage license. Only recently, parties afflicted with epilepsy were refused license to marry in some small city in Illinois.

In regard to immigration. Should we allow parties suffering from tuberculosis to land in this country? I think not, unless they possess the means necessary to maintain themselves in a hospital designed for the treatment of such cases. Since it is so necessary for persons having tuberculosis to be sent to a more favorable climate, railroads should provide some means of transportation for them that will prevent the exposure of other passengers.

With good sanitary laws we diminish the danger of infection, so it becomes an easy matter to cope with the inherited tendency to this disease. Here it is necessary to begin as early in the life of the patient as possible. Good, nutritious food, plenty of fresh air, exercises which tend to develop the chest, increasing the resistance to cold by cold salt sponge baths, oil rubs and the wearing of proper clothing, careful treatment during and immediately following those diseases that predispose the patient to lung trouble, and removal to a favorable climate where practicable. If these precautions are persistently and intelligently followed, those persons possessing the so-called strumous diathesis need have no fear of contracting tuberculosis.

Before closing I should like to add that I am, I think, fully aware of the many obstacles in the way of carrying out the above views, but I also firmly believe that until these measures can be accomplished we will not be able to do much toward limiting the spread of tuberculosis. So even though it is only a step at a time that we can advance, let us not waste any time in taking that step.

REMOVAL OF BLOOD STAINS.

According to Dr. Blenkiser, in the *Scalpel*, surgical instruments, sponges, the hands of the operator, and other blood-stained articles, may be readily cleansed by washing them in a tepid solution of tartaric acid, and then rinsing in water without soap.—*New York Medical Times.*

SUPPLEMENTARY COURSES OF TREATMENT REQUIRED FOR CHRONIC NASAL INFLAMMATION.

BY THOS. F. RUMBOLD, M.D.,
ST. LOUIS, MO.

By supplementary courses of treatment for chronic inflammation of the nasal passages is meant a renewal of the local applications at such seasons of the year as the patient is most liable to have renewed colds in his nasal passages, throat, and ears. They are given to a patient who has been under the care of a physician long enough—from two to five months, if an adult—to reduce his nasal inflammation to such a condition that he does not complain of any of his former symptoms, but not long enough for the inflamed membrane to have completely recovered. In such a case the secretion from the mucous surfaces has assumed nearly its normal character, and quantity, and all abnormal growths, should there have been any, have been removed from the nose, throat, and ears.

Importance of Supplementary Treatment.—During my pupilage with Dr. S. D. Gross, in Philadelphia, in the fall of 1861, I was fortunate enough to pay attention to the remarks of some intelligent patients concerning the value of a few treatments given at the early portions of the spring or the fall. At the time I thought that some patients took cold more easily in the spring, and others more easily in the fall. In either case a prophylactic course was recommended. I was more fully impressed with the benefit of this method while treating a number of cases of nasal disease in the United States General Hospital, at Jefferson Barracks, Mo., from 1862 to 1865. While in this hospital I had a number of such patients under my daily sight for nearly three years, so that I was well able to judge of the liability of the disease to return at the changes of the seasons, even under the most favorable circumstances. While in this hospital, I found that instead of giving a few treatments, either in spring or in fall, that is, in whichever season they took cold more easily and severely, they should be treated both spring and fall, that is, two seasons after the first course, instead of one.

In a paper I read in the St. Louis Medical Society in June, 1896, on the "Treatment of Simple and Ulcerative Rhinitis," I mentioned the importance of such treatments. The points of the paper were the hygienic rules, which I directed my patients to follow during, and after treatment, and "the necessity for spring and fall treatments to maintain the still weakened mucous membrane in such a condition that it could in time recover its normal defensive power, so as to withstand the inclemency of the weather at the changes of the seasons of the year"; both points absolutely essential to the ultimate cure of this disease. By this time I found that more than two seasons of supplementary treatments were required for most patients.

This paper was published in pamphlet form in 1870. In my work on the "Treatment of Nasal Catarrh," 1881, on page 255, I stated: "These fall and spring treatments (for patients from twenty to forty years of age) will have to be repeated from three to five years; and for the oldest class, they will have to be repeated fall and spring, or, fall or spring maybe during their lifetime"; showing that I had again increased the number of supplementary treatments. In my work on the "Medical and Surgical Treatment of Catarrhal Diseases of the Nose, Throat, and Ears," 1886, p. 476; and again, in the *Journal of the American Medical Association*, June, 1893, page 885, I repeated the same thing.

The Liability of the Return of the Disease.—One of the reasons for the general impression that nasal inflammation is incurable—an impression that exists among the medical profession and is held by the laity—is that the disease is universally observed to give evidence of return at the next change of the season, after the primary long course of the treatment, either spring or fall. This return is observed in all patients, from the tenth, or even, in some instances, from the fifth year of age, upward. The return is taken as an evidence that the first or primary long, expensive course of treatment did not cure the case, and be it marked, this is true; but if a few treatments with the spray producer are given at the right time, it will be found that all of these symptoms disappear at once, at least, in a very much shorter time than during the primary course. Generally the supplementary treatments in the spring and fall amount to about ten per cent. of the number of the primary course. For example, if a patient has required fifty or seventy treatments during the primary course, the supplementary treatments will be about five or seven during the spring and fall. If the patient takes good care of himself, the number of these spring and fall treatments will gradually decrease year by year, as his mucous membrane returns to its normal condition, and it always does return to this condition if the patient—under forty-five years of age—takes good care of himself. As all the growths have been removed during the primary course, the case is one of uncomplicated nasal inflammation, and this inflammation is not of such an atonic character, and disappears under a few treatments.

The ultimate curability of this disease is a frequent subject of discussion during the primary course of treatment of a patient. After he has been under care for a few days, long enough for me to be enabled to judge as to the length of time required for this primary course, I tell him, as agreed upon the day of the first visit, about the number of treatments that will then be required, and about the number of courses of supplementary treatments, as well as the number of treatments of each of these courses. The whole subject is usually talked over, so that there is a perfect understanding, and with this understanding the patient places himself under my care for a term of years, the length of which will be according to the chronicity and severity of the disease.

Almost always the patient will voluntarily say that he will not forget to call for his spring and fall treatment; but should he do so, I write him a letter, again going over what I said to him during the preliminary course of treatment, plainly telling him that the supplementary treatments are required to continue the healing process commenced by the treatments he has received. The fact that the patient has been relieved of troublesome subjective and objective symptoms renders him unconscious of the necessity of further treatment, and the dread of further increasing his expenses is an additional reason for keeping away from his physician, notwithstanding the promise to return; but the certainty of the return of the disease and the uncertainty of the return of the patient make it imperative that he be reminded by letter concerning the importance of the supplementary courses.

While it is a matter of importance to the rhinologist's reputation that these supplementary treatments should be given, it is sometimes also a matter of great difficulty to get the patient to return for them, and were it not that a promise of a cure or of an alleviation, as the case may be, has been made upon these conditions, it would be very convenient to let the patient go without a written notification. If he does not come, consequently is not cured, he adds additional facts to the report of the incurability of the disease, and says that his physician did not perform his promise. This alone is what makes it worth while to keep him in sight, and under treatment. In five to seven years the number of these uncured, delinquent patients will be so great and their complaints so continuous, that they will have a very injurious effect on one's practice. It is

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plainly seen that the only way to prevent this injury is to have them return for the supplementary courses. In a word, they must be cured, and the supplementary courses are essential to their complete recovery.

Toward the end of these supplementary courses, the patient's mucous membrane may be so nearly in a normal condition that ordinary exposures will have no ill effect upon this once excessively sensitive membrane; therefore, he may miss a spring or a fall course, or he may pass a year or so, and then require but one or two local applications.

Too much emphasis cannot be laid upon the importance of curing curable cases by the supplementary treatments, and of continuing the spring and fall treatment with those whose age or the severity of the disease precludes a cure, cases in which a promise of relief only has been given. The measure of success following my practice in the treatment of this disease, in a large proportion of my patients, justifies me in this course.

The best seasons of the year are spring and fall; usually from March 15th to May 15th, and from September 15th to November 15th. These dates are in the seasons of the greatest change or variance of temperature and moisture, and I have found, from many years' careful observations, more persons require treatment at these seasons than during any other periods of the year.

The Number of Supplementary Courses.—The age of the patient, which nearly always agrees with the grade of the inflammation, will do much to determine the number of the supplementary treatments at each course, and the number of years that these courses should be repeated, also the number and extent of the growths removed will have a determining influence as to the number of supplementary treatments. A boy of fifteen, who has required the removal of a large number of growths from his upper air passages is in need of a greater number of these courses than a person of even thirty years of age, who has not required the removal of abnormal growths.

The infant may require two to four treatments at the next change of the season after its first or primary course. If it has secretion flowing from the nasal passages, or if it has acquired growths on the tonsils, then it certainly will require a supplementary course. The mucous membrane, even at this age will not have completely recovered during the primary course of treatment. These treatments are given at proper intervals during the sixty days that form the season for supplementary treatment.

Children from the third to the tenth year of age, even with uncomplicated nasal inflammation may require a few supplementary treatments, usually from four to six of these treatments for one or two seasons; while those who have had growths removed or have had ear complications, will require these treatments for two years, at least.

Youths from ten to twenty years of age, having uncomplicated nasal inflammation will require from five to ten treatments during each supplementary course for two years. A case complicated with growths or with deafness will require two more of these courses. If these supplementary courses are not taken the disease will certainly return, as will the growths, and in a few years the patient will be in as bad a condition as though no treatments had been given, or no growths had been removed. This must be plainly and repeatedly told the patient.

Adults almost universally have nasal inflammation of so severe a character and of so long continuance, that they have a large number of nasal growths and many also have growths in the throat, and sometimes in the ears, as well as lung or other complications. They will require from eight to fifteen treatments at each change of the season for from three to five years.

It should not be expected that the blood-vessels of the mucous membrane and of the sub-mucous tissues, which have been enlarged to twenty or forty times their normal diameter, would be reduced to their normal diameters by the curative effect of a few months' local application. Such an expectation could be expressed only by a person totally unacquainted with the pathology of naso-mucositis. Even considering the mucous membrane alone, it is still in an atonic condition; and although the inflammation is greatly reduced, and all the former painful symptoms absent, yet the membrane must be maintained in an unirritated state for from three to five years before complete recovery can take place, before nature can make complete reparation. It requires this length of time, and the correction and protection of the supplementary courses to allow it time to regain its normal resisting power, and it will not have done this until its blood-vessels and nerves have returned to their normal condition. As soon as this has taken place, the patient, instead of taking cold more frequently than any one around him, will be no more liable to take cold in his nasal passages, throat, and ears than in other organs of his body. This is a positive evidence of his complete recovery; after this no more supplementary courses are required. In case these courses are not taken, the inflammation will certainly commence to increase with the first colds, which are usually taken at the change of the seasons.

If the patient is forty-five years of age, or older, the return of growths very seldom takes place; even if the inflammation returns with unusual severity,. the extension of the disease is toward other organs, notably the eyes, the lungs, the stomach, and the brain. If the first, it is shown by the rapid changes of the anomalies of the vision; if the last, it is shown by unusual acts of forgetfulness, unusual irritability of temper, and by symptoms that are frequently called nervous prostration, etc. In a very few instances insanity results from the extension of this disease to the brain.

BROKEN BONE-SHAFTS.

BY THOS. H. MANLEY, M.D.,
NEW YORK.

Medical Journals must be filled with something, no matter how absurd or preposterous the subject may be, provided only that it be sustained by the force of enough assurance.

This is about the position of fracture-treatment at the present time. For instance, M. Lucas-Champiouniere, of Paris, in his late work on fractures, condemns the fracture-box and the splint, and advises the man with a broken leg to commence the ambulant course and move about the day after the injury. But, is not the mangled member to be placed in some sort of brace, and it with the body placed at rest, for at least a few days?

Bless your innocent soul, no!

All that belongs to an antiquated age and has no place in modern fracture-therapy. And we, gullible Americans, at one gulp, swallow all this stuff, simply because it is of European importation. During my own experience in the treatment of a great number of traumatisms—more than five thousand fractures having come under my observation while serving my interneship in 1875 and 1876—the older methods of fracture-treatment were in full force; and it is my conviction to-day, that simple fractures then were treated with much greater success than they are to-day. We had then what we knew as the "English" method and the "French." The former permitted a mangled limb to remain at rest until intumescence and primary inflammation disappeared, before a rigid adjustment was applied, and required muscular relaxation and joint flexure in posture. The latter called for immediate osseous rectification and permanent immobilization in the extended position; a very seductive thing, in theory.

The improvement in the treatment of compound comminuted fractures in the past twenty years has been enormous. Sir Joseph Lister's work opened the way to a revolution in this direction; and Ollier has placed the profession under an eternal obligation to him for teaching us the art of osteoplasty, in every description of bone injury.

In consequence of these advances on conservative lines at the present time, in no description of fracture whatever, in which the limb is not totally destroyed, no thought of amputation should be entertained until all the resources of our art have been exhausted to save the limb.

Fracture occurs most commonly in children; next, in the male sex, until the meridian of life is past, and after this, as Duplay shows, as degenerative changes are more rapid in the female, fracture with her is most common. This is a class always difficult to treat. Confinement to bed kills many; especially the very fat, or the feeble. In this class the earlier we can get them out the better.

Let it be remembered that fractures, like a division through the soft parts, unite, or fuse, by two distinct processes—viz., primary or secondary union. Many times have I seen simple fracture with no displacement solidly unite in a week. On these no splints were applied. The knees were flexed and the leg comfortably placed on a straw pillow.

We can never entirely dispense with splints, but there can be no doubt, as commonly used, they do more harm than good.

Of all things we must guard the fullest liberty of the circulation. Tight splints sometimes seriously menace it. A year ago I made an extensive study of the effect of fracture on the circulation; using the transparent webbing of the frog's foot for the purpose. I found, when I fractured the femur, the capillary circulation was immediately arrested by injury of the femoral artery. After the circulation was re-established splints were applied to the limb. These arrested the circulation in whole capillary territories, and greatly moderated the velocity of the blood-tide in the arterioles.

In some cases of non-union of a bone-shaft, more perfect fixation (?) by secure splinting may be tried; of course, in vain; when the experienced surgeon takes the case in hand, he removes every description of dressing, and orders free joint-action on either end of the fracture.

Massage, baths, and electricity utilized, the circulation is liberated and stimulated, the absorbents are called into fresh activity, edema disappears, and osseous consolidation soon welds the loose fragments solidly together.

At the elbow in the child, the ankle in the male adult, and the wrist in the middle-aged adult, or elderly persons, mostly women, fractures often occur. In spite of any special plan of treatment adopted, as a rule they leave a certain degree of impairment in function, and more or less deformity.

As a matter of fact all the above group of complicated cases belong to this class. Muscular relaxation, and the fullest possible freedom of the circulation are the *sine qua non* in their treatment.

Much difference of opinion yet remains on the period when passive motion should begin. Professor Lewis A. Stimpson and other distinguished authorities on fracture are rather inclined not to employ this indiscriminately in their cases.

In conclusion, let it never be forgotten that, in those traumas attended with disorganization of bone, the osseous fracture is but one lesion; for the nerve-trunks, blood-vessels, and muscles all share in the mutilation of tissue, and demand equally with the bone our closest attention. Dr. Andrew J. McCosh, of New York, in a recent excellent summary on the "Year's Progress in Surgery," very judiciously advises, that the general practitioner will do well, in the treatment of fractures, not to prematurely embrace the latest doctrines on their therapy; nor any method which has not the support of the majority of surgeons. In any event, in every description of severe fracture, the physician hardly does full justice to his patient if he neglects to take in one or more consultants. In the city, among the poor, this is obviated by sending severe cases to the hospital.

CYCLING.

As preventive measures against the dangers of this fascinating sport may be mentioned: First, the use of a low gear; second, the upright position in riding; third, adequate food when riding and the avoidance of muscle poisons, such as beef tea; fourth, the avoidance of preparations of kola and coca, which numb the sense of weariness; and fifth, on no account should the cyclist continue riding after he has commenced to feel short of breath, or when there is the slightest sense of weariness in the chest.—Dr. Herschell in *Lancet*.

ELECTRICITY IN GYNECOLOGY AT THE HOWARD HOSPITAL, PHILADELPHIA.*

G. BETTON MASSEY, M.D.,
PHILADELPHIA.

At a time when the attention of practitioners specially interested in the diseases of women is so largely occupied with the mere operative treatment of these affections, it is worthy of note, that through the liberality of the managers of the Howard Hospital in this city, a complete equipment has been provided for the application of electricity to suitable cases of these affections, affording an opportunity for the worthy poor to obtain the benefit of this remedial agency in the dispensary and wards, as well as pay patients in the private rooms. The result has been a distinct broadening of the scientific and philanthropic work of an institution that is well represented by able practitioners in the other departments of medical work.

By way of preface to this brief review of it, I may say that the electro-therapeutic work at this institution has not been conducted with any hostility to other modes of treatment, commonly employed in similar cases, though a special effort has been made to show its comparative value in certain affections in the interests of both science and humanity; and particularly, it should be said that no pretension has been made that it is adapted to the cure of all the diseases of women. It is but a helpmate to the other remedial agencies of a well-equipped general hospital, the youngest helpmate, in fact, yet dealing, as it does, with a force that is the latest and most valuable acquisition of mankind, has demanded the unremitting attention of special workers, that knowledge and skill already acquired may be usefully applied and new scientific facts discovered. That its practice trenches upon the alleged field of other workers is a mere assumption on their part. There are no preserves in the practice of medicine that can successfully resist the inroads of a better form of treatment, and no truly scientific workers will set up any other standard of action than the best interests of the patients confined to their care.

The cases accepted as appropriately treated by electricity in this department have been strictly gynecologic, the majority presenting evidences of chronic inflammations, exudations or hypertrophies of the pelvic organs, neoplasms, pathologic displacements or disturbed

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*Read before the Philadelphia County Medical Society, September 9, 1896.

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innervation, including certain neuroses with pelvic manifestations and post-operative, painful affections.

During the eight years that this work has been conducted a considerable experience has been accumulated, leading to conclusions that may be of general value when summed up in concise form.

Fibroid Tumors.—Thirty cases of fibroid tumors of the uterus have been under treatment for varying periods, including several now in attendance. The results accomplished have been reasonably good, considering the roving nature and imperfect intelligence of the majority of clinic patients, many of whom fail to attend regularly, or stop altogether after their discomfort has been removed. A submucous tumor in one case was expelled from the uterus by electrically-induced contractions. Three tumors disappeared almost entirely by absorption, one of them so large as to fill the abdominal cavity below the navel. In eight cases there were symptomatic cure and great reduction in size. In another eight cases symptomatic cure and slight reduction in size were the result. In two cases there was cure of the symptoms, but no reduction in size. Four cases are still under treatment with a favorable outlook. In one case only was there no improvement. Three cases failed to continue the treatment after so slight a trial of the method as to leave the possibility of benefit undetermined.

Including the symptomatic cures of tumors that were arrested in growth, with or without reduction in size, the list shows that twenty-two cases were practically successful. As seven are still under treatment or were lost sight of after insufficient treatment, we have twenty-two practical successes, contrasted with but one known failure to improve, or about ninety-five and one-half per cent. of successes and four and one-half per cent. of failures.

No bad results whatever attended the treatment of any one of the cases, and practically no discomfort attended or followed any of the applications. Two cases were, however, operated upon by colleagues after the cessation of treatment, one of these, tabulated as the only case receiving no improvement after a proper length of treatment, dying under the knife, and the other, tabulated as receiving insufficient treatment, being successfully operated upon by Dr Hamill.

An impartial review of these cases cannot do otherwise than convince the unprejudiced that the electric control of the nutrition and forced absorption of fibroid tumors may be brought about in a considerable proportion of cases, and that a surgeon is not warranted in subjecting a case of this nature to the dangers and uncertain consequences of an operation for removal until the possibilities of the Apostoli treatment have been fully tested. The conditions which contraindicate the Apostoli method have now been fully defined, and include purulent formations in the tumor or its neighborhood, and cystic degeneration of the tumor itself. The existence of cystic degeneration is easily ascertained by palpation, and purulent inflammations of the adnexa are now also capable of being predicted with great certainty by means of a special diagnostic response to electric treatment, which has been pointed out by Apostoli. It has been ascertained that if the faradic current fails to relieve temporarily the pain complained of, and if the pain is aggravated by an intra-uterine galvanic application, the existence of a sub-acute purulent inflammation may be predicted with confidence. In such cases electricity intelligently applied becomes of great service to surgery in demonstrating the necessity for an early and thorough operation for the removal of a tumor that is unadapted to any other treatment. The one case mentioned as not relieved in any way by electric treatment gave distinct responses of this nature, intense cramp-like pain being provoked by intra-uterine treatment. At the operation an ovarian abscess was found on one side and a cystic ovary on the other, both presumably of gonorrheal origin.

The treatment of some of these cases was tedious, and in the end some of the twenty-two successes have bunches of harmless, fibrous tissue still remaining in the uterus, but each one of these patients presents a final result infinitely superior to the results attained in successful cases of hysterectomy for fibroid tumors in the following particulars, aside from the fact that their lives have not been placed in jeopardy; they still possess their ovaries and the womanly functions dependent on these organs; they have no abdominal scar, with existing or threatened hernia at its site to render their condition about as miserable as before seeking relief, and they have had no stump left in the abdomen to become attached to the intestines to produce after-pains and constipation.

Chronic Metritis.—Of a large number of cases of chronic metritis, or hyperplasia consequent upon catarrhal inflammation of the uterine cavity, sixteen cases are recorded in the hospital books as receiving electric treatment. Of these as many as thirteen were cured, two improved, and one not improved. The cured cases reported complete relief from pain and bearing-down sensations, the uterus was found to be shrunken to near or quite its normal size, and some of them reported subsequent pregnancies.

Chronic Perimetric Inflammation.—Fourteen cases of chronic perimetric inflammation, that is, cases in which the uterus was enlarged, fixed, and surrounded by inflamed and adherent tubes and ovaries, were under treatment, six of which were cured, six improved, and two not improved.

Chronic Ovaritis.—Of the same general nature were four cases of ovaritis, two of which were cured and two improved.

These three groups of cases constitute a very important portion of the affections for which parous women seek medical help, and when it is remembered that a common pathologic factor enters into them all—simply an arrested resolution following a microbic invasion, or germ-phagocytic contest, it is clearly evident that a line of treatment is indicated for all that will arouse dorman nutritive energies and assist the local tissue-scavengers, the phagoctyes and lymphatics, in reconquering the territories in which they have been so far defeated. Embryonal cell-proliferation and tissue-degradation are but other names for the debris and disorganization of this drawn battle, and it behooves us to step in and assist in reorganization rather than lop off these territories in hasty despair.

Post-Operative Pain.—The next largest number of cases under treatment were suffering, strangely enough, from that new disease, with which many American women are now destined to spend the remainder of their days—post-operative pain and neuroses. It is a sad warning that eight cases applied for treatment for pains, aches, and ill health following removal of the ovaries or removal of tumors, in each case the condition being worse than before the operation. From two to five years had elapsed since the operation in each case, eliminating the mere climacteric symptoms that all have to go through. One of these cases was entirely relieved, three improved, and four remained unimproved.

Carcinoma.—One case of incipient, but undoubted, carcinoma of the breast was cured and has remained well. Two cases of carcinoma of the cervix were temporarily improved and one not improved. The value of zinc-amalgam cataphoresis is only now being tested in this affection, and it is my intention to make a full trial of the method in carcinomata that are strictly local.

The remaining cases of interest may be reported in tabular form:

	Cases.	Cured.	Improved.	Became Worse.
Subinvolution	7	7		
Menorrhagia	5	4	1	
Endometritis	4	3	1	
Retroflexion	2		2	
Retroversion	2	1	1	
Pyosalpinx	2	1		1
Hydrosalpinx	1	1		
Ectopic Gestation	1	1		
Prolapse	1		1	
Urethral Caruncle	1	1		
Pruritus	1	1		

NITRIC ACID AND GUM CAMPHOR IN THE TREATMENT OF CHANCROID.

By LUCIEN LOFTON, M.D.,

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The various methods for treating chancroidal sores are all more or less painful, unless you have secured local or general anesthesia.

To render a sore of this nature free from pain, it is necessary to use an unusual per cent. of cocaine direct to the part, or inject the part freely with a four per cent. solution of the drug mentioned. The danger here lies in new infection. Chancroid is a dangerous and treacherous lesion, and many times the virus plows its way beyond the range of the eye, and when local applications are made this feature of the case should always invariably be looked after. The different mineral acids are used as an escharotic. Carbolic acid is preferred by many, on account of its anesthetic properties. The use of the thermo-cautery and white heat are almost a relic of the past, and I might say a barbarous one.

The main feature in the treatment of this trouble is thorough cauterization and cleanliness.

An application, that I have used with eminent success, both from the standpoint of being painless and thorough, is equal parts by weight of pure nitric acid and camphor gum. Owing to the explosive properties of this compound, it is necessary to always make a fresh mixture. If you do not desire this, by leaving the bottle which contains the solution uncorked, you can keep the compound in good shape indefinitely.

By applying the preparation with a piece of absorbent cotton, wound about a toothpick or match, direct to the sore, little if any pain is experienced. The escharotic effect of the nitric acid is maintained, and the patient is always delighted with the result, should he have experienced the pure acid before.

This same compound acts with equal reliability upon, and in the treatment of, old ulcers and unhealthy granulations.

Just what nitric acid and gum camphor form I am unable to say.

SOME OF THE UNSUSPECTED EFFECTS OF THE BROMIDES.*

By J. ALLISON HODGES, M.D.,

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Regarding the effects of the bromides on the system in large or continued doses, not a little difference of opinion has existed. Ordinarily, these salts are considered by the profession as harmless in their constitutional effects, and the limitation of the dose, or the duration of their exhibition, is gauged only by the idiosyncrasies of the patient, or the personally conceived demands of his own nervous condition. The usual carelessness of the physician in this respect is as reprehensible and dangerous, in my opinion, as the recklessness with which the patient becomes accustomed consequently to use these drugs for every supposed nervous manifestation. In small and interrupted dosage, the bromides are calmative and effective remedies, and in the great majority of patients, act as a moderate sedative to the nervous functions generally, without any obvious ill effects.

This fact often causes their indiscriminate and continuous use, and subsequently there supervene certain physiological effects which are attributed in many instances to the disease under treatment, as one of its manifestations, instead of to the agents which are being used to combat it. This is manifestly true in those cases where large doses have been given, and I think in those cases as well where small doses have been continued for a long period, the ultimate constitutional effects of course being the same. If these latent and commonly overlooked effects, which I shall mention, were always as patent as the bromism, which eventually comes on after long-continued employ of these salts, thus showing resentment at their farther ingestion, it would be needless to direct attention to them.

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*Read before the Richmond Academy of Medicine and Surgery, August 25, 1896.

But such is not the case. On the other hand, many of the physiological effects are masked and obscured by other temporarily existing conditions. Originally, and even as late as 1870, the bromides, and especially the bromide of potassium, was considered an alterative and deobstruent, (1) and analogous to the preparations of iodine. It was proved experimentally, however, a few years later, that they were nervous sedatives, and, specifically, cerebral sedatives, and no clinical fact is more conspicuously verified than that of their efficacy in these and allied pathological conditions. Their ultimate effect on the system, however, is yet a *quæstio vexata*; some authorities maintaining that since some patients have taken them largely and continued them for a long time without injurious result, or, indeed, any very striking result of any kind, that they are consequently harmless; while other experimenters, on the contrary, have found them, even in moderate doses, to exercise powerful influences on the constitution, and in larger doses, or too long continued, to produce peculiar poisonous effects.

Most physicians, I believe, are prone to overlook and disregard the true physiological effects of these medicaments, because they attribute the induced symptoms to the primary neurotic condition of the patient, and in the end are often surprised to find an unaccountable depression of vitality, both physical and mental, that far outweighs the evident control of the nervous symptoms that had been obtained by this treatment.

I am free to admit that such was formerly my experience, having been taught the innocuousness of the bromides, until it was forcibly impressed upon me some years ago by several cases that staggered my credulity, and more recently, when that recognized authority, Dr. Weir Mitchell, by his experience of their baleful effects, has enforced the lesson upon me.

As to their toxic effects, the bromide of potassium is recognized as the most powerful, and the bromide of sodium as the least toxic. There is a general correspondence, physiologically, in the action of all the bromides, except that of ammonium, due, doubtless, to its base, and they are all very diffusible, which accounts in some measure for the no more frequent ill effects observed, for it is certain that when administered in large doses no inconsiderable portion escapes absorption, being easily detected in the intestinal mucus, etc. Most persons take the usual doses with no perceptible disadvantages other than acne, roughened skin, etc., but the prolonged administration develops in all cases that condition of chronic poisoning known as bromism, which differs from the effects of a few medicinal doses in the extent and intensity, but not in the character, of the symptoms.

If the bromides are to be continued for any indefinite period, it is difficult to determine what is a safe dose, for it is clinically substantiated by Voison (2) that 60 grains, repeated for from three to six times, at intervals, with some persons will occasion slight nausea and diarrhea, while Bartholow (3) has ascertained that 100 grains for one dose will lower the temperature in a healthy adult from one-fifth to one-half a degree, the respirations from two to five, and the pulse from ten to twenty beats per minute.

It is some of the unusual, or, at least, not usually suspected, effects of the bromides that I desire to consider in this article, symptoms which, in their milder forms, must be familiar to all practitioners, but which sometimes, I think, are attributed to a mistaken parentage, to the disease and not to the remedy. Among these commonly unsuspected effects may be mentioned the following:

1. Increased irritability of temperament.

It is a notable fact that most patients who have undergone the bromide treatment for any considerable length of time, for nervousness, insomnia, etc., develop an irritable, peevish, and querulous disposition, disproportionate to the exciting cause. This is particularly noticeable in epileptics, and is often assigned as one of the manifestations of the disease itself. This, I am confident, is a mistaken assumption, for, as a clinical fact, attested in many of these cases, in my experience, the temporary suspension or withdrawal of the treatment at once moderates and often completely suspends the irritable tendency. In the case of epileptics, also, it is true that this irritability is increased, even though the convulsions be lessened in their severity. Many nurses, even, will bear testimony to this fact.

2. A depression of spirits, with a tendency to moderate melancholia.

There are some neurotic cases in which moderate doses of the bromides occasion despondency in the individual, which, at times, amounts almost to a melancholia, though this is rare.

In June of last year, I was consulted by a lady of a neighboring city, who came to me with the history of grave melancholy. She was intensely depressed, and in constant fear of "losing her mind." She was about 45 years old, and a great sufferer from insomnia. Upon examination, no physical defects were discoverable, and, but for a slightly anemic condition, she was in fair physical health. Inquiry elicited the fact that, one year before, when suffering from pelvic pain, a mixture of bromides, containing about 80 grains a day, had been prescribed by her physician; and, fearful of a return of the trouble, and to insure sleep, she had almost constantly maintained this treatment ever since. At my solicitation the treatment was partially suspended, and in two weeks there was marked improvement. At the end of a month, upon the entire cessation of the bromides, there was almost complete restoration to health. Later, with the aid of bitter tonics, she was restored to her normal condition, and up to this date is in perfect health, and has had no return of melancholia.

3. Impairment of memory and also of contractility of muscles.

In nearly all cases, where large or continued doses of these drugs are taken, there is, to a greater or less extent, an impairment of memory. Weakness of mind, without perversion of intellect, is a very constant result of the use of large doses. Failing memory, especially in epileptics, who, according to the general routine of practice, take the greatest quantity of bromides, is almost invariably assigned to the disease as the causative factor, but my experience demonstrates that the bromides themselves are, for the most part, responsible for this condition. Dr. Mitchell (4) reports the case of two children, ages 10 and 13, respectively, suffering with mild epilepsy, who, owing to a mistake of the nurse, were given 100 grains a day of lithium bromide for a few days. Memory was impaired in both. One forgot the letters of the alphabet, and the other had some curious confusion as to the time of events, misdating them. This state of altered memory, in both cases, passed away in two days after the bromides were withdrawn. These cases also illustrate that motility is impaired by the bromides, for the same author relates that the physical weakness in both was very marked, and that while both children could stand, neither could walk. The bromides evidently possess the power to destroy or impair the irritability of the motor and sensory nerves, and the contractility of muscle; and Dr. Rudisch (5) has pointed out that the paretic symptoms first manifest themselves in a tendency to ptosis, and, later, an increasing feeble-

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ness of all the limbs, amounting, in some instances, almost to a hemiplegic condition. While it is not often observed, still several cases are reported where large doses, given by mistake, or reckless lay use of the drug, have induced a complete relaxation of the sphincters. A prompt withdrawal of the drug has always restored the functions to their usual offices.

4. Irritant to the gastric mucous membrane.

In small doses, well diluted, the bromides are generally acceptable to the stomach, and by some believed to be positively anesthetic to the mucous membrane. In large doses, or in continued administration, however, they are distinctively irritant. This point is clinically well established as regards large doses, but it may not be so evident in the case of continued moderate doses, which in effect, however, produce the same results.

Several years ago a lady consulted me for diarrhea, and thinking it was of nervous origin, I administered the bromide of sodium in 30-grain doses, thrice daily, in conjunction with other treatment. Upon her return, several days later, I found her condition not only not improved, but worse. She informed me that, not having been benefited by my prescription, she had also taken larger doses of the bromides that she had been accustomed to taking when she felt "out of sorts," along with the medicine I had given her. Learning that it had been her habit to take several doses a day of bromide of potassium for some months, my suspicions were aroused that that drug, intensified in its irritant effects by the 90 grains daily I had ordered, was to blame for her non-improvement. A suspension of treatment, with rest and boiled milk diet, speedily effected a cure.

5. Bromides act as an antaphrodisiac.

Some authors affirm that, if given in large doses, they diminish and, at length, if long continued, entirely subdue the venereal appetite. M. Puchi (6) insists that, under these conditions, the patient will fall into a condition of impotence, which sometimes outlasts the use of the medicine several days. My experience, however, has not confirmed the antaphrodisiac properties of these drugs.

6. They disturb the circulation.

Very obvious effects are produced on the action of the heart when large doses are administered. Bartholow (7) says that the number of the cardiac pulsations is not only reduced, but their force is diminished, and the tension of the arterial system is lowered. Dr. Da Costa indorses this statement and inveighs against the use of the bromides in those persons having weak hearts, "especially the form of cardiac weakness designated as chronic cardiac asthenia."

7. Extraordinary susceptibility to toxic effects in cases of cerebral lesions, etc.

Several recognized authorities speak of the sudden bromic toxication liable to occur in persons who have suffered cerebral lesions from trauma, or who have had emboli or necrotic processes around clots. Dr. Mitchell ([8]) reports a case of rheumatism in a young man who had an embolus in the right middle cerebral artery, and whose condition presented increasing evidences of destructive irritative changes in the brain. To control this he gave 60 grains of potassium bromide daily for three days. Acute mania was the result, and was not relieved until he ceased the treatment. Surgically, this is an important fact, and should be heeded.

8. Tendency to give rise to homicidal and suicidal impulses.

MM. Rames and Huette ([9]) were the first that I can learn to chronicle any form of intoxication or mental derangement from the employment of the bromides in large doses. Hammond ([10]) and others have also recorded cases of mental derangements with hallucinations of a melancholic character, but Escheverria was the first to call attention to the tendency to homicidal and suicidal impulses. The first case that ever caused me to look with suspicion upon the bromides as capable of producing sudden toxic effects was one of this nature. In 1890, I was called to see a patient, female, aged 65, and found her to be a nervous, miserable creature, emaciated, feeble, and hysterical. I administered the bromide of sodium in 60-grain doses daily, and there was some improvement in the nervous symptoms. Subsequently, on account of expense, I ordered the salt in crystals for her, and only saw her occasionally. Finding that the effect of the quantity allowed was not as marked or soothing as formerly, and wishing to secure a speedy result, she gradually increased the dose. Soon a mild diarrhea supervened, but this did not arouse my suspicions. At this time, I should judge that she was taking about 150 grains daily. She became very nervous, and her family noticed some signs of periodical excitement, but no importance was attached to it. The dose was still further increased by her without my knowledge, and in a few days, it then being about two months from the inception of the treatment, she suddenly left the house, and, going to a river near at hand, attempted to drown herself. When rescued, she still showed a tendency to destructive outbreaks with unrestrained violence of temper. This suggested the possibility of bromic influence, and the discontinuance of the bromides at once proved the correctness of the supposition, for after that, except when once again subjected to the same treatment, did she ever exhibit any symptoms that might rise to the danger line. Dr. Draper relates the history of a case in a young man who was an epileptic, who could not take 60 grains a day for a week without becoming homicidal.

9. Bromides weaken the nervous system.

It is evident to my mind that these salts, by reason of their characteristic physiological action, must, in continued doses or large doses, depress certain organic functions and therefore be weakening to the nervous system, for in order that a sedation of the nerve centers may be secured, they diminish the action of the heart, lower the temperature, and consequently lessen the blood supply to various organs. Their field of therapy is limited, and I am skeptical if their efficacy, even in temporarily controlling the nervous explosions of the epileptic, is commensurate with the deleterious effects to the patient's general constitution. A patient addicted to the bromic habit presents a picture not easily effaced from memory, for his pallid face, dilated eyes, weak and tremulous gait, are only too patent evidence of a nervous wreck and a blighted mentality.

My object in presenting this paper at this time is to direct attention to the unusual or exceptional baleful effects of the bromides in continuous or unnecessary large doses, for, as a practitioner, I realize that our profession, and consequently the public at large, are not cognizant of them, and hence not alive to the dangers incident to their persistent use.

Too little care is often used in prescribing these drugs, and too little attention is paid to the proper regulation of the dose; circumstances, in my opinion, which are responsible for the great and increasing harmful consumption of the numerous proprietary preparations of the bromides which are now used by our people as "headache" cures, "insomnia" cures, etc., and which owe their popularity and efficacy to a varying proportion of the bromides in their composition. It is not so much our indifference, as physicians, to the best methods of prescribing the bromides for specific purposes, as our carelessness in not informing our patients of the danger of these preparations, whereby they are all but unconsciously contracting the "bromo" habit, that we are reprehensible. It is not the small and occasional dose that ultimately wrecks the constitution, but the continuous daily use, in many cases, for every nervous manifestation, as conceived and diagnosed by the layman himself without the knowledge or direction of the physician.

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THE MORALS OF A SURGEON.

What a man does is the proof to the world of what a man is. Many good people fear that the advance of science will bring about the retrogression of morals and religion. We do not agree with them. But if they cannot accept our judgment, let them weigh well a fact like this: Mr. Jonathan Hutchinson, F.R.S., and ex-president of the Royal College of Surgeons, addressed his professional brethren assembled in annual congress the other day, and he thus spoke: "I bore with such equanimity as I could the discovery that I could not compete with my friend in the ratio of successes obtained" (in operations for ovariotomy), "and, acting on the rule of conduct that I would never keep a patient in my own hands if I believed that some one else could do what was needed with greater prospect of success, I gave up doing ovariotomies, both in public and in private, and used to transfer my patients from the London to the Samaritan Hospital." Here is a rule of conduct which has never been excelled in moral worth in any department of professional life or private behavior. A most far-reaching and truly noble rule is this of Mr. Jonathan Hutchinson's; and the fact that he announced it toward the close of his career, in the hearing of hundreds of his professional brethren, who are almost as familiar as he is himself with the conduct of his professional life, is proof that he spoke mere truth. If these are the morals of men of science may we not say of men of all professions and callings, "O si sic omnes!"—*The Hospital.*

SOCIETY REPORTS.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

Regular Meeting, August 11, 1896, *Hall of Y. M. C. A.*

Dr. Landon B. Edwards, President, in the chair. Dr. Mark W. Peyser, Secretary and Reporter.

DISLOCATION OF THE ARCH OF THE FOOT.

Dr. J. W. Henson reported a case of dislocation of the arch of the foot. Woman, on June 9th, while crawling along a shed to reach a window, fell a distance of fifteen feet, alighting on her feet, dislocating the arch of the right foot. The foot turned outward like that of a negro, and the internal cuneiform could be felt in the middle of it. She had made a wooden sandal to support the arch. There was no injury elsewhere, except rupture of the internal lateral ligament of the left knee.

Dr. M. D. Hoge, Jr., reported a similar case. Man, aged 20, while in a somnambulastic state, climbed out of a fourth story window, falling on his feet. The arch of one foot was completely broken, and it spread out flat—a protuberance being discernible in the middle. He had made a leather wedge, which was put in the sole of the shoe, the thick edge inward. The man now walks as well as any one.

THE ANTI-TUBERCLE SERUM TREATMENT OF CONSUMPTION.

Dr. J. Allison Hodges mentioned his experience with this treatment in several cases, not all of them having been benefited by it, but referred especially to the following case: He was called on May 10th to see Mr. A., aged 42, who was confined to bed—temperature, 102.5; respiration, 26; great difficulty in breathing, attended with an incessant cough and expectoration, and intermittent pain in right side. On examination, he found consolidation of the lower two-thirds of the right lung, with a suspected abscess forming. The sputum was subjected to microscopic examination, and revealed the presence of tubercle bacilli in large numbers. In response to questions as to the former history of this case, it was learned that his family history was good; that on January 17th, of this year, he had suffered from a slight attack of facial paralysis, and again on April 2d he had experienced a slight attack of hemiplegia on the right side. From both of these attacks he had rallied, and now nothing was noticeable, except a slight deviation of the tongue and weakness in the right leg. Further examination revealed an obscure history of syphilis. The past improvement in his nervous system was due to the use of the iodides in moderate dosage. In view of these facts, a diagnosis of "mixed infection" was made, and he was again put upon specific treatment in largely increased doses.

On the fifth day the abscess ruptured, accompanied with intense fetor, but there was no abatement of the fever or cessation of the cough. In fact, the case seemed rapidly progressing towards a fatal termination. For five days longer, the specific medication, together with symptomatic treatment, was continued, but without perceptibly favorable results.

It was then determined to institute the anti-tubercle treatment, and it was commenced on May 25th, with 15 minims of the Paquin "anti-tubercle serum," and continued daily, increasing 5 minims each day until 25 minims were given. At the time of commencing this treatment, the patient was almost exhausted, and in the opinion of several physicians who saw him, his case was considered all but hopeless. After the third day of treatment, there was noticeable a slight reduction in the temperature, and on the fifth day the patient was enabled to secure a comfortable night's rest, the cough having diminished to a great extent, and the exhausting night sweats having almost entirely ceased.

After the eighth day of treatment the improvement was still greater, the temperature becoming normal, the appetite returning, and the cough and night sweats almost entirely abating.

The treatment was now continued at 20 minims almost daily, for on two occasions when the dose was gradually increased to 40 minims, an irritative febrile condition was induced, and at the same time an increase of albumen in the urine and indications of an erythematous eruption were noticed. In two weeks the patient was enabled to sit up for several hours at a time, and was altogether comfortable.

The treatment was continued till July 1st., having consumed a little more than one month, and on the following day the patient walked a mile and stood for four hours in the streets, reviewing a parade. He is still under observation, and is now taking ninety drops of a saturated solution of potassium iodide daily.

The happy termination of this case, it is admitted, is an exceptional one, but it is illustrative beyond doubt of the efficacy of the serum treatment, even in some cases of mixed infection, which are not the accepted cases for its exhibition.

Some of the features noted in this case worthy of observation are:

1. The speedy reduction in temperature—having improved after the fifth injection, and becoming normal after the eighth.

2. The improvement in the cough and expectoration, the fetor ceasing entirely after the tenth injection.

3. The abatement of the night sweats, and their subsequent cessation at the expiration of the second week.

4. The return of the appetite, and a gain up to the present time of eighteen pounds in weight.

5. The improvement in the consolidated lung tissue, though this condition cannot be said yet to be "cured," but the microscope reveals a continually decreasing number of bacilli present.

Dr. Virginius W. Harrison said that the case reported by Dr. Hodges recalled to his mind a case similar in some respects. A white man, aged 32, tubercular history, two deaths in his family, he himself having suffered from what was called scrofula in his early childhood—the scars of the removal of the glands now disfiguring his neck. The patient was then emaciated, appetite gone, night sweats, and a condition which looked like an early dissolution of the body. The patione said that he had suffered from shortness of breath and cough for several months—the shortness of breath increasing. On examination of his lungs, the right side showed that the apex was doing practically no work; the lower portion was consolidated. Temperature 102. Dr. Harrison advised him to go home and go to bed, but he declined to go, and went to work, and continued at work for two days, when he had a chill. On the third day he had another chill, and went to bed. The doctor saw him on the fourth day, when he said that, after the first chill, he suffered intense pain in the whole right side. Some hours after the second chill his cough increased a great deal, and soon a bloody, offensive pus was expectorated; during that twenty-four hours he spit out one quart of this material. This continued, so that in the next twenty-four hours he expectorated nearly a pint, and gradually diminished until six weeks had passed and it ceased. Dr. Harrison got a bottle of this material (which he showed to several members of the Academy), and got Mr. Hugh Blair to examine it for him. The examination revealed the nature of the material to be pus, mucus, and blood. Dr. Harrison did not have it examined for the tubercle bacillus, but with such a personal history and family history, he feels justified in concluding that the condition was due to tuberculosis.

Dr. Harrison remarked that he is aware that tuberculosis of a gland may be perfectly eliminated by removal or suppuration, when the tuberculosis is in the gland alone; and he is further aware that the same bacillus may be latent in other portions of the body, awaiting renewed excitation to renew its energy in its deadly work. This man was treated by inhalations of beechwood creosote, and given liquid peptonoids and tonics. He has recovered sufficiently from this spell to return to his former occupation. The future of this man, in his opinion, is most doubtful, but the advocates of the serum therapy seem unwilling to show their confidence in its use by dropping the drugs they have found in years past to be useful in the same way that serum therapy claims to aid in the diseases.

Dr. Harrison added that he would be glad to hear from Dr. Landon B. Edwards on this subject, as we know he has had a good many patients under treatment by this new anti-tubercle serum method.

Dr. James N. Ellis remarked that, in using anti-tubercle serum, it is well to look out for the development of an eruption. He ignored the first red blotches, and the man did not sleep for five days. Injection of three-fourths of a grain of morphine had no effect whatever in allaying the intense irritation.

The President said that, up to the present time, he had treated fourteen cases with Paquin's anti-tubercle serum. Two of these, referred to him by other physicians, are hopeless. In one of these two, whenever coughing results in free expectoration, the temperature is reduced to 99° or 100°, but in twenty-four hours it is up again. Cavernous respiration is so marked that, as was said, no hope could be held for recovery. The second of the two is even more hopeless. It is a constant matter of wonder how he lives. In three other cases there has been no material improvement, but neither have they grown worse. In the remainder there has been such improvement that two have been discharged, apparently cured, but with advice to return occasionally for inspection, as it were. One of these is a vocalist, who says she sings with the same power as before she was affected. The second is a medical student, who, since his discharge, has gone through a mild attack of pneumonia, which left some slight consolidation. The hot weather prevents, in a measure, carrying out all details of treatment.

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Right here may be remarked that, with this record, it must be acknowledged this treatment is of great benefit.

Dr. Edwards said he never could have expected such good results from creosote and tonic treatment generally, as he has had in the nine cases, which include the two just cited. One of those discharged is using creosote internally. In one case, now much improved, death was expected in three months at most; and while he is not completely cured yet, the advance toward it is remarkable. In another case, the attack was in its incipiency, and creosote alone might have cured without the serum. Whenever the temperature is high, and remains so, no treatment is of service. Edson's treatment has not seemed to make any favorable impression.

The cases mentioned, in which fatal issue seems inevitable, are of mixed infection.

If Paquin's treatment had no curative value, its palliative qualities would alone render it remarkable—stopping night sweats, non-interference with appetite, if anything, increasing it, etc. In hot weather, cod-liver oil does more harm than good. If employing it, do so in the form of emulsion. When the stomach is enervated, it does as much damage as anything can.

Dr. Harrison: Have you used the serum treatment alone? If not, is it because you have not the necessary confidence?

Dr. Edwards replied that he employs accessory treatment, simply as in fighting he would employ both fists, not depending on the right solely. With so dangerous an enemy as tuberculosis, he is unwilling to do less than everything that promises good.

Dr. Hodges stated that he had used the serum treatment alone with benefit.

ABSCESS OF PALM OF HAND FOLLOWING TYPHOID FEVER.

The Secretary reported the case of a boy convalescing from typhoid fever, who, two or three days after temperature reached normal, complained of pain in the right hand. Next day the pain was more severe, and swelling had occurred. Salicylates were prescribed, with the result, that, on the third day, pain had subsided, but swelling was found greatly increased. That afternoon information was received that the "hand had burst and corruption was pouring out." On investigation, this was found to be true, and further, that the pus had dissected its way clear to the tips of the fingers and down to the wrist, the whole hand and all the fingers being involved, except the thumb and thenar eminence. Incisions were made between the index and middle, and ring and little fingers, to facilitate drainage. Under the daily employment of hydrogen dioxide and carbolized water, pus formation is rapidly ceasing. Of course thrombus was diagnosed, but the wonder is at the rapid formation of pus.

Regular Meeting, August 25, 1896, *Hall of Y. M. C. A.*

Dr. Landon B. Edwards, President, in the chair. Dr. Mark W. Peyser, Secretary and Reporter.

Dr. J. Allison Hodges read a paper on

THE NOT USUAL EFFECTS OF THE BROMIDES. (See page 529.)

Dr. J. N. Upshur remarked that Dr. Hodges' paper was one of great value to the Academy and the profession at large. He entirely agreed with the views expressed in it. For many years he has believed that the profession is as much too prone to give the bromides as morphine. He was peculiarly in sympathy with the statement as to the indiscriminate use by the profession and laity of the various proprietary preparations containing these agents. He has been in the habit of prescribing the bromides with more or less frequency for several years, because he did not wish to prescribe them empirically, and because of their effect on the circulation. He hoped the article would be widely read, and that the profession would heed the warning given.

Dr. Wm. S. Gordon agreed with both gentlemen preceding him. Of course, it is routine practice to give the bromides in epilepsy. He narrated the case of an epileptic girl who, after taking considerable doses, developed all the prominent symptoms mentioned by Dr. Hodges; and at the time, he wondered how far they were due to the medicine or the disease. He asked if, under these circumstances, had Dr. Hodges substituted hydrobromic acid, and, if so, the symptoms, when pushed to the farthest point? He has used hydrobromic acid with good effect, but he had never continued it long enough to contrast its effects with those of the bromide salts.

The President agreed with most of the points made by Dr. Hodges; and yet he could not allow the enthusiasm occasioned by the valuable paper to overshadow the good results often obtained from the use of the bromides. He did not know how we could manage without them. It was not usual, in his experience, for patients to desire a continuance of their use; he wished to do away with the idea that there is a bromide habit, due to a desire on the part of the patient to take this agent. Large doses have their value in certain cases; but, ordinarily, these are not called for. As a rule, the bromide treatment is the most valuable for epilepsy. In the experience of those treating *petit mal*, it is of little value; but in the *grand mal*, it is of utmost value.

Suicidal and homicidal tendencies are noted, not in the cases where there is deliberation and cunning, but in the careless, somnambulistic, etc. At any rate, he was not prepared to say these tendencies came from bromism. The epileptic is often dangerous to himself and others, even without treatment by bromides.

Dr. Hodges, in closing the discussion, agreed with Dr. Edwards in the efficacy of the bromides in some cases, but limited their greatest utility to cerebral disorders from overaction. He differed with him, however, as to the danger of patients forming a "bromo habit," and cited the large and increasing use by the laity of the numerous bromo preparations, as was evidenced by their enormous consumption within the past few years. He doubted the necessity of the bromides or their ultimate benefit to the patient in the treatment of epilepsy, and cited instances to substantiate this assertion, claiming that other drugs, or even the bromides differently administered, would accomplish the same results. He had used hydrobromic acid as a sedative and hypnotic, and had found it useful; but had never pushed it to its physiological effects. It was probable, however, that under such conditions, it would prove an irritant to the gastric mucous membrane.

Reports of cases:

CONVULSIONS AND HEMI-HYPERESTHESIA PRECEDING TYPHOID FEVER.

Dr. Upshur reported the case of a woman, aged 20. Two months ago he was sent for at night and found she had had a severe convulsion before his arrival. When seen, her mind was not entirely clear—was very nervous, presenting symptoms of a markedly hysterical condition. There had been much malaise for a week previous. The prominent symptom was hyperesthesia of the whole right half of the body and head, especially marked in the arm and leg. Simple touch would throw the group of muscles in the neighborhood into violent spasms. Along with this, for a week, there had been a regular rise and fall of temperature—99° in the morning to 101° in the afternoon. At the end of the week, the hyperesthesia seemed to subside, but she was nervous and sleepless; the tongue was heavily coated, pulse frequent, abdomen distended and tender, with gurgling in the right iliac fossa. In fourteen or fifteen days, symptoms of marked typhoid made their appearance. From that point the case was typical, with a tendency to development of coma vigil. Coma did supervene, and the paient died on the twenty-seventh day. Obstinate constipation persisted throughout the course of the disease. Every action was procured by an enema. The onset of the trouble was the most curious he had ever seen.

Dr. Upshur also reported the next case, concerning which he would like to have an expression of opinion. Woman, aged 40; seen ten days ago in consultation. She had been in delicate health for about a year, and there was obscurity as to her trouble. During last spring she was satisfied as to the existence of pregnancy. Taking some medicine given by a negress, she aborted and recovered. Later, she was seized with violent pain in the right groin, extending around the crest of the ilium down the thigh—being particularly painful in the knee, and paroxysmal in character, especially pronounced in the morning and afternoon. There were rises and falls of temperature at various times of the day, from 99° to 104·5° F.

During an attack, when first seen, he had found an overdistended bladder. The urine was albuminous, but no trouble ensued upon drawing it off.

Ten days ago she was removed to the Old Dominion Hospital, the temperature rising as a result two degrees, falling in a day or two.

The administration of chloroform did not effect a complete relaxation of the abdominal muscles, but a thorough examination of the pelvis revealed no trouble, unless, possibly, a pre-existent endometritis. A point just above Poupart's ligament on the right side showed evidence of tenderness. Per vaginam, he could approximate the fingers so that the thickness of the abdominal wall could be made out. Examination of the urine by Mr. Blair evidenced slight albumin, but was negative otherwise.

Query: What is the matter? The only pronounced symptom is the pain. She will not voluntarily change her position, and as a result, she has a bed-sore.

What is the cause of the rise of temperature? Under the use of turpentine the condition has improved somewhat. There may be an abscess of the kidney. He had suspected the pain to be hysterical. She had been taking a great deal of morphine—in one day a grain and a half hypodermically. Since being at the hospital the doctor has tried to do away with its use. The patient has taken several remedies for the relief of pain, usually falling back on morphine. As an experiment, a syringeful of pure water was injected, but in a half-hour complaint of great pain obliged administration of one-fourth grain of morphine. The doctor thought a great deal of the pain was due to the fear of it on being moved.

There were no sweats, no hectic; she is not sensitive to light pressure. Examination by her attending physician elicited great complaint of pain; but in ten minutes he could manipulate and not get much response.

Dr. Hodges wished to suggest that the first case was thrombus with suppuration, complicated or not by typhoid.

He thought the second case more than simple hysteria. If there were no disease of the pelvic organs, it might be neuralgia or neuritis with after-developed hysteria or fever.

Dr. Upshur replied that there was no neuritis.

IS THERE A TYPHO-MALARIAL FEVER?

The Secretary reported a case, not because of uniqueness, but as contributing to the settlement of the much-mooted existence of typho-malarial fever.

T. H. P., male, aged 36, more than three weeks ago, was taken sick with what looked like cholera morbus. In four days a chill came on, followed by sweating and fever; thereafter, for four or five days, there were two and three chills at irregular intervals daily; the temperature one morning reaching 106°, falling to 102° upon the application of a cold bath. Thirty grains of hydrochlorate of quinine were administered in twelve hours, and as a result chills ceased, but there remained a persistent fever, which was stationary in the morning, rising in the afternoon, and accompanied by nearly all the symptoms which justified a diagnosis of typhoid fever. He entered his fourth week of sickness to-day, but his temperature has been normal for four or five days in the morning, with exacerbation in the afternoon. Chills came on again last Friday, and with the exception of Sunday, he has had them daily at irregular intervals, and sometimes two in twenty-four hours.

Dr. R. F. Williams made a blood examination and found absolutely no plasmodium, but a marked leucocytosis, which argues a favorable result.

Drs. Gordon and Deaton saw the case in consultation, and agreed that the trouble is pure typhoid.

Dr. Wm. S. Gordon said, regarding this case, that it was undoubtedly typhoid. If it had been typho-malaria, when the chills were stopped the fever should have ceased, and the blood examination further verified the diagnosis. He reported the case of a lady confined two weeks ago. He had ceased his attention, when on the twelfth day, she was seized by a violent chill at 4:30 p. m., and again at 11 p. m. Friday last, there was another at 11 a. m. Quartan fever being suspected, he gave quinine, but there ensued a chill at 11 p. m., followed by high fever and sweating. There was no trouble with the breast that morning; the lochia was free from odor, and everything relating to the uterus was normal. At night, the breast was affected and lead-water was advised. The next morning mammitis had come on—no suppuration. The breast trouble did not ensue until the fourth day. It was relieved. Yesterday, the patient was entirely free from fever. She was thoroughly cinchonized. Remembering the influence on the mind of the time of attacks, he endeavored to take hers from under its influence by mental diversion, anecdotes, etc.; but at 4:30 p. m. the chill came. If she had not been under the influence of quinine she would in all probability have had another last night. The case, a double quotidian of the quartan type, is one the doctor has never seen before.

As to the cause: The house is surrounded by flowers, grown over with vines; has, necessarily, decaying vegetation in the garden; flowers in the rooms. These, with moisture and heat, furnish all the etiology desired.

FACIAL PARALYSIS FOLLOWING MUMPS, ENLARGED ONE-HALF OF THYROID, ETC.

Dr. Jacob Michaux described a case of facial paralysis. Girl, aged 17; personal history good. A short time ago he was told she had mumps. The left side of the face and lips were decidedly swollen, having the stiff appearance indicating loss of motion, which, indeed, was the case. There was tenderness under the ear, but he was struck by the absence of swelling in front of the ear (which usually occurs in mumps) and by the appearance of the lids, mouth and side of the face. The tissues on the affected side were tender, especially at the angle of the jaw.

On complaining of her throat, he examined it and found enlargement of the right lobe of the thyroid decided, but none of the left.

She was treated at home until acute symptoms subsided, with iodide of potassium and corrosive chloride of mercury. After she was able to be up and about, faradic electricity was applied to the affected side, and both it and galvanic, especially the latter, to the enlarged gland.

The doctor wished to know if there was any connection between the two conditions, or the parts. If so, what?

The girl was not positive as to the existence of thyroid enlargement before the facial symptoms. There was no sore throat, but some temperature.

EXTRAUTERINE CAVITY.

Dr. Michaux's second case was an unusual condition of the uterine canal, which he has seen twice. Both were in cases of abortion—one at two, the other at four months. In the latter, on introduction of the finger into the os, he found a cavity, which, as well as he could make out, was three inches in diameter. At first, he thought he had a case of placenta previa, but on passing the finger through he discovered the fetus and placenta, which were duly delivered. In the other case the canal was smaller.

SECTION ON OPHTHALMOLOGY,

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

A Stated Meeting of the Section on Ophthalmology was held in the Lower Hall of the College of Physicians on the 17th of March, 1896, Dr. Wm. F. Norris, Chairman, presiding. Present: Drs. Friebis, Hansell, Harlan, Norris, Oliver, Randall, de Schweinitz, Shaffner, and Zimmerman, Fellows of the College; and Beaudoux, Bromley, Capp, Green, Krauss, Leopold, Lovelace, McGuigan, Mellor, Moorhead, Murdock, Palmer, Posey, Rogers, Schwenk, Shoemaker, Sulzer, Sweet, Tait, Taylor, Veasey, and Ziegler as guests.

Dr. George C. Harlan exhibited a case of traumatic enophthalmus in a five-year-old boy, who five months previously was wounded by the horn of a bull. The right cheek and temple and the lower eyelid were lacerated, and the inferior margin of the orbit was chipped. There was also complete ptosis. At the time of examination, the tendo oculi was found to have been torn away and the lower lid was dragged downward and outward by the action of the orbicularis and the contraction of the cicatrix.

The surgeon who attended the patient at the time of the accident, reported that there was considerable orbital cellulitis, with abundant discharge of pus from between the lids, but there never was any exophthalmus. He thought that the cellulitis was confined to the lower part of the orbit. At present the eyeball is retracted and has the appearance of being very much smaller than its fellow. The cornea is situated five millimeters behind the plane of that of the other eye. There is scarcely more ptosis than would result from the depression and loss of support of the lid. When the patient looks directly forward, the palpebral fissure is five or six millimeters wide. He insists that he sees well with the eye. Though the movements of the eyeball are much restricted, no diplopia can be detected. There is complete inability to look upward beyond the horizontal line, either directly or to the right or left. Horizontal movements are normal and the downward excursion is much exaggerated. Dr. George Friebis spoke of his case of traumatic enophthalmus seen nine years ago, in which there was sufficient recovery to manifest but little difference between the two eyes; there being nothing left except a slight doubling of objects when looked at below the horizontal line. In his case there was no incarceration of the extraocular muscles.

Dr. Francis M. Perkins showed a case of monocular retinal detachment with high myopia.

Dr. Charles A. Oliver gave the clinical history of a case of ciliary staphyloma and excavation of the optic disc following traumatic cataract in a four-year-old boy. The clinical picture of this case of complicated secondary glaucoma was so complete, having been studied from almost what may be termed its very incipiency to the final result, and the varying symptoms evolved from time to time were so at variance with what one would expect in such cases, that it offered itself as a most interesting and a most instructive study of this type of disease.

Unlike similar cases of sudden obstruction to proper lymph-stream circulation, there remained from the very first, as shown by the fields of vision, and, as afterward proven ophthalmoscopically, an element that may possibly complicate many more cases of the traumatic type of this disease than is at present imagined, and that is retinal detachment. Again, the condition of the vitreous and its peculiarity of opacities, taken in connection with the history of the case, would go far to show that there was a hemorrhage into that humor which most probably might have been recognized ophthalmoscopically had the patient been seen a week earlier. These, with a few, though certain evidences of a low grade iridocyclitis, made the case still more atypical.

On the other hand, the progressive diminution of the field of vision; the gradual distention of the globe, and the localized tissue-bulgings in the upper ciliary regions; the deep and characteristic cupping of the nerve-head; the reapproximation of the remaining areas of retinal detachment; and the late fixedly increased intraocular tension, all show the certainty of degeneration even in a young and yielding eyeball, when such tissues are subjected to a persisting increased intraocular pressure.

As answer to the vexed question of therapy in such cases, the author will leave this for another and more extended communication, reserving the present brief though detailed account, of the clinical history as an interesting and useful exposition of a grouping of symptoms, which have been carefully studied, and can be thus employed to illustrate the results of two conflicting contemporaneous conditions produced by traumatism: localized inflammatory reaction and obstruction of lymph-stream circulation.

Dr. George E. de Schweinitz presented a further note on an unusual form of macular lesion following iritis. The patient, a fifty-year-old woman, recovered with a nearly normal sharpness of vision, but with some vitreous opacities from a violent attack of serous iritis. The eye remained comfortable for eight months, when she appeared with a positive scotoma and the ability to see to count fingers only when situated in the periphery of the visual field. In addition to the positive scotoma, which the patient described as appearing "like a dinner-plate with a green edge," there was a small absolute scotoma about the horizontal level. Ophthalmoscopic examination revealed an oval, reddish area, giving the impression of a disintegrating hemorrhage, and containing in the center several white dots situated exactly in the center of the macular region. Dr. de Schweinitz referred to the unusually distinct macular ring which seemed to indicate that there must be some thickening in the periphery of the hemorrhagic area.

Dr. Oliver exhibited a water-color sketch of a case of unusual submacular hemorrhage forming a part of some very curious lymph extravasations in the retina without any vitreous disturbances, found in the left eye of a healthy sixty-five-year-old woman upon whom he had successfully removed a black cataract by simple extraction some two months previously, the operation being perfectly smooth and the appearance of the interior portion of the eye normal in every respect. The sketch was made for him by Miss Margaretta Washington, of this city.

Dr. de Schweinitz described the clinical history of a patient suffering from convergent strabismus of the left eye and a very high myopia 16 D. Ophthalmoscopically, the following lesions were present: A small posterior polar cataract, numerous fine vitreous opacities, and a horizontally oval optic disc, of a greenish-gray color. The nerve-head was imbedded in the center of a huge mass of opaque fibers, which followed the course of the principal vessels almost to the periphery of the eye-ground, and in all directions, but less markedly downward and to the nasal side. A small patch in the macular region was not covered by the opaque fibers, but was disturbed by superficial choroidal changes. There was almost complete loss of nasal field and of the entire center of the visual field, with exception of a small area to the nasal side of fixation, about ten degrees in diameter, within which the white test object was dimly seen. Colors were correctly appreciated when held in the temporal field. The case was illustrated by a water-color drawing made by Miss Washington.

In the discussion, Dr. B. Alexander Randall showed a card-specimen of a case of retained nerve-sheaths in a case that had been sent to him for supposed intracranial disturbances. In this case there was an isolated patch situated in the macular region. Dr. Oliver exhibited the drawing of a case in which the medullation began at the edge of the disc and divided into two comet-like processes extending along the lines of the larger retinal vessels, this case having been seen through the courtesy of Drs. Goodman and Ziegler, at the Wills Eye Hospital. He also spoke of a drawing that was made for him by Dr. Randall, which was one of the most extensive of annular types that he had ever seen. The case occurred in a nine-year-old, highly myopic boy, who never had any subjective symptoms of the condition.

Dr. James Thorington, by invitation, exhibited an asbestos cover-chimney with disc-attachment for ophthalmoscope purposes. The original form with the disc-attachment he had made two years previously. The present arrangement showed that five changes could be made in the disc. (1) The one centimeter opening fulfilled all the purposes of the original chimney. (2) The two centimeter opening permitted greater freedom of movement on the part of the observer, without moving the light. (3) The three centimeter opening may be used as a source of light for the concave skiascope, or for the ophthalmoscope, otoscope, etc. (4) A round section of cobalt blue glass for the chromatic aberration test of ametropia had been added, as likewise: (5) The perforated disc, with perforations and spaces, each 1.45 millimeter, to test for astigmatism at one meter's distance. The author stated that he had a

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new form of contrivance in the course of preparation, which will have a simple shutter with different changes in it, to work up and down in front of the opening in the asbestos chimney by means of cog-wheels. He will also employ a horizontal slip one-eighth of an inch wide to exercise the oblique muscles as suggested to him by Dr. Savage, of Nashville, Tenn. Dr. Charles Shaffner strongly recommended the asbestos form of chimney, as it radiated but little or no heat and was always sufficiently cool to handle without burning the fingers. It had been his intention to present one that he had been using for some time, but as he considered that the present form and the one recently brought forward by Dr. M. W. Zimmerman were much better, he had refrained from so doing.

Dr. Thorington showed a new form of perimetric lenses, which received its name from the fact that their optical center corresponds to the point of fixation in the fields of vision. The reasons given for the recommendation of the lens were, that it gives to the eye that form of lens which is consistent with a normal form of the visual field; it removes the edge of the lens to a sufficient distance that the edge cannot be seen to any great degree while the eye is fixed straight ahead; and that bifocal segments can be made much larger. He stated that the increase in weight need rarely exceed the ordinary form of twenty-five to thirty grains; the large size does not attract much attention; and the cost will remain the same as in the ordinary styles used. Upon account of necessary great weight and thickness, he believed that this form of lens cannot be used for cases of aphakia and high myopia, but showed that as this class of cases constitutes much less than one-half of all refraction cases (37 per cent.), the lens will be accepted in the majority of instances.

Dr. Oliver exhibited and demonstrated a series of microscopic specimens showing the various forms of eyes seen in fish, reptiles, birds, quardrupeds, and man. He showed the marked differences in the conditions of the dioptric media; the varying shapes of the eyeball; the relative positions of the eye in the head of the animal; the adaptions for near and for far-focusing; the arrangements for increase of the interior illumination; the positions and peculiarities of the nerve-structure; and the relationship existing intra-cranially between the two organs, in the aquatic, the terrestrial, and the aerial forms of animal life.

The Section then went into executive session. Upon motion, adjourned.

SECTION ON OBSTETRICS AND DISEASES OF WOMEN.

Milo B. Ward, Chairman, Topeka, Kan.; George H. Noble, Secretary, Atlanta, Ga.; Executive Committee, Jos. Eastman, Indianapolis, Ind.; F. H. Martin, Chicago, Ill.; J. T. Johnston, Washington, D. C.

As an effort has been made to keep a mailing list of the members of the American Medical Association interested in the Section on Obstetrics and Diseases of Women, please be kind enough to publish a notice to the effect that all members desiring to participate in the proceedings or to attend the meetings of this Section should send their names and addresses to the undersigned, as no communication concerning papers, program, etc., can be had with members not upon the proposed list.

Most respectfully,
GEO. H. NOBLE, Secretary,
186 S. Pryor St., Atlanta, Ga.

Other medical journals please copy.

The program of the proceedings of the Sixth Annual Meeting of the American Electro-Therapeutic Association to be held in Allston Hall, the Studio Building, Clarendon street, near St. James avenue, Boston, Mass., Tuesday, Wednesday, and Thursday, September 29, 30, and October 1, 1896, has reached us, and holds out promise of an interesting meeting. Papers are to read and discussed, which deal with electricity in its various forms as applicable to medicine and to the surgery of different part of the body.

COSMETICS OF CASTRATION.

The esthetically inclined editor of the *Medical Record* suggested some time ago that the unsightly void left by orcheotomy should be filled by a celluloid testicle for cosmetic reasons. This suggestion (from a recent report of a discussion before the Chicago Medico-Legal Society) would seem to have fallen on fruitful soil. Discussing the question of castration of criminals, Dr. Gertrude G. Wellington remarked that a man castrated for disease wished something to take the place of the organ removed that would give him the semblance of manhood. The only thing that could be found were some balls of celluloid, but they each contained a little bell. She would advise that in habitual criminals and sexual perverts after castration, these celluloid balls with their jingling bells be inserted so that as the man went about among women of the world the bells would proclaim him incapacitated.—*Medical Standard.*

CORRESPONDENCE.

MEDICAL NEW YORK.

New York, September 15, 1896.

With the approach of cooler weather there is every evidence of returning activity on every hand—social, commercial, and medical. To-day witnesses the opening of the winter sessions of the Polyclinic and Postgraduate, and each institution begins with a large number of matriculates from the interior, who are seeking to replenish their stores of medical and surgical knowledge. The last sessions of these schools have been well attended and particularly successful. The increasing number of physicians who attend these schools annually amply justifies their existence, showing that they supply a real want which is realized by the great masses of practitioners throughout the country.

Much indignation has been felt and expressed over what has been termed the patent medicine scandal at Bellevue Hospital. The Commissioners of Public Charities set apart a ward in the hospital for the trial of a secret remedy for drunkenness, alleged to have been discovered by a New York physician. The protests of the regular medical staff were absolutely ignored, and the physician (who was not a member of the staff) allowed to experiment with his supposed remedy.

The Medical News was particularly energetic in denouncing such unusual and high-handed procedure on the part of the Commissioners, and it called attention to the important fact that the so-called cure was the property of a stock company, which was seeking to exploit the remedy under the auspices and sanction of the hospital. That this *sub-rosa* investigation was suddenly discontinued after about two months' fruitless trial seems to have been due, not so much to lack of sympathy and encouragement on the part of the Commissioners, as to lack of energy and perseverance on the part of Dr. Oppenheimer, the alleged discoverer and chief promoter. After the death of two or three patients he abandoned the remainder, and the secret cure, which had been so tenderly fostered by the kindness of the Commissioners, was left as a foundling upon the doorstep of the hospital. So at present the relations between the medical board of the hospital and the guileless gentlemen who are the Commissioners of Charities under the reform government are naturally somewhat strained.

Physicians coming to New York should not fail to visit the Academedy of Medicine, 17 West 43d Street. They will be welcome. If they can attend one of the section meetings, so much the better. The building itself is ideal, especially constructed for the needs and purposes of the Academy and containing everything that can make the place useful and attractive for the members. Visitors will be most interested in the library, which, by the way, is the largest medical library in this country, excepting that of the Surgeon-General in Washington. There are upwards of 40,000 bound volumes and about as many pamphlets, and almost every day adds to the number. The Academy subscribes to every medical journal published, and when volumes are completed they are bound for permanent keeping. It thus becomes an easy matter for one to consult all the medical literature upon any subject, and the writing of a scientific paper is so much facilitated as to become almost a thing of joy.

The patient mentioned in my last letter with malignant disease (epithelioma) of the larynx, upon whom the preliminary tracheotomy was performed, has had his larynx extirpated After the tracheotomy it was decided to try the effect of iodide of potash, on the possible ground that the disease was syphilitic. This was discontinued after two weeks' trial, extirpation was decided upon, and all of the larynx, from the base of the epiglottis to the first ring of the trachea, was removed. It is in recent years that surgical skill has robbed malignant disease of the larynx of some of its terrors and dangers. Old methods of removing the larynx were usually followed by about forty per cent. of deaths, many of which were due to a secondary pneumonia, caused by wound secretions trickling down into the lungs. A method of operating, first devised by Bardeleben, I think, and first used in this country by Dr. Solis-Cohen in the remarkable case of Mr. Hickey, obviates this element of danger, and was the one employed in the above case. It consists essentially of shutting off the trachea from the wound while the latter is in process of healing. After the upper portion of the larynx has been removed the remaining trachea is dissected up for a short distance, separated from the esophagus, and brought forward above the sternum. The wound in the neck is closed behind the trachea, and the latter is protected from the oozings from the former by proper dressings. Such, very briefly outlined, was the operation as performed by Dr. Bodine in this case. The patient has made a good recovery thus far, he now breathes without embarrassment, and his general condition is much improved. This method of attacking malignant disease of the lárynx is believed to mark a distinct advance in the surgery of this region. Although it is comparatively new, and has not been done a great number of times as yet, it has had sufficient trials to demonstrate its value. I should have mentioned that the above patient is already making encouraging progress in regaining his voice. By the way, the *New York Medical Journal* (September 5th) contains a good article by Dr. D. B. Delavan, Professor of Laryngology in the New York Polyclinic, which reviews the entire subject of recent advances in the surgical treatment of malignant disease of the larynx.

At a late meeting of the New York Academy of Medicine, Section on Rhinology and Laryngology, Dr. C. E. Munger discussed briefly, some "New Remedies in the Treatment of Diseases of the Upper Air Passages." He called attention to the use of acetanilid in the nose after operations. Application of the pure powder seems to favor rapid healing. He recommended formalin, one or two per cent. solution, as a deodorizer and disinfectant in purulent and syphilitic conditions of the nose and naso-pharynx. Pyrozone is valuable as an antiseptic and deodorizer. Two solutions had been employed, a four per cent. and a twenty-five per cent. He had used the latter with fair results in follicular pharyngitis and tonsillitis. For atrophic and ulcerative rhinitis he had used considerably ortho-mono-chloro-phenol. It lessens the crusts and secretions very promptly. He used a twenty-five per cent. solution in glycerine. The drug was especially useful in atrophic rhinitis.

Dr. C. C. Rice read a paper upon the "Methods of Controlling Nasal Hemorrhage." This hemorrhage, he said, was usually either from the septum or floor of the nose. He had seen only one case from the outer wall. If the hemorrhage were due to constitutional causes, renal or cardiac, etc., these of course should be treated. A general practitioner might resort to post-nasal plugging, but an expert, with a speculum and head mirror, should locate the bleeding point and insert a tight antiseptic tampon. The nostril should be plugged from the floor upward and forward. The bleeding point might also be touched with the galvano-cautery. Dr. F. J. Quinlan said that in these cases chromic acid, fused on a probe, was an excellent hemostatic.

Dr. W. F. Chappell made some remarks upon the *oleostearate of zinc* as a base for the application of medicines to the nose and pharynx. It is a semi-fluid substance, which does not absorb moisture, and which may be applied alone or incorporated with other agents.

Dr. B. Douglass presented a case of primary carcinoma of the inferior turbinated bone, a somewhat rare lesion of this part.

Dr. Holbrook Curtis described the case of a patient with so-called Rose Influenza, who always experienced a severe attack of this trouble whenever she passed a flower-stand. He had treated her with hypodermic injections of the extracts of the rose, lily of the valley, violet, heliotrope, and other choice varieties of perfumery, and after a year's treatment his patient could tolerate the presence of all sorts of flowers. Taking the "cue" from this case Dr. Curtis is now making some experiments upon hay-fever. He didn't say so, but I suppose these consist of the hypodermic injections of sweetly scented extracts of rye-grass, millet, rag-weed, blue-grass, clover, chenopodium, polygonum, etc., as the peculiar idiosyncrasies of each patient may require. Hay fever sufferers will doubtless await with interest the outcome of these novel studies in grass-extracts and therapeutics.

Dr. Rawlings, of Sandersville; Dr. Carson, of Griffin, and Dr. Brooks, of Atlanta, have been attending the Polyclinic.

L. B. GRANDY, M.D.

RESUSCITATION FROM CHLOROFORM.

Resuscitation from chloroform is effected by the König-Maas method as follows: The operator, standing on the left side of the patient and facing him, places the ball of the thumb of the opened right hand upon the patient's chest, at a point between the apex beat and the sternum. He then repeatedly presses in the thoracic wall with a quick, strong movement, at the rate of thirty to one hundred and twenty times to the minute. The efficacy of the method lies in its direct action on the heart, restoring not the respiration only, but the circulation also. If on a fresh cadaver the pericardium be quickly and forcibly compressed, it is easy to detect a distinct pulse wave in the carotid arteries; and the pupils will be found to contract as the blood fills the capillaries of the iris.—*Sanitary Era.*

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EDITORIAL.

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TRI-STATE MEDICAL SOCIETY OF ALABAMA, GEORGIA, AND TENNESSEE.

The eighth annual meeting of this society to be held in Chattanooga, Tenn., on October 13, 14, and 15, promises to be both interesting and instructive. A number of papers are already on the list, and a large attendance is hoped for. Dr. J. B. Murfree, Murfreesboro, Tenn., is president, and Dr. Frank Trester Smith, Chattanooga, is secretary.

DRINKING-WATER.

Our remarks upon the subject of drinking-water in last month's issue may properly be followed by a few words in connection with its domestic purification. We do not intend to discuss the separation of inorganic substances so much as the prevention of access to the body of living germs capable of setting up disease, though processes having the latter in view frequently are more or less successful with regard to the former also. Filtration is the popular device for removing all the possible impurities of water, and as a matter of fact it may be stated that, as usually employed, filtration is more likely to do harm than good. It does harm because the filters are either inefficient, or if at one time efficient, become clogged and add more to the fluid than they remove. No filter whatsoever can be left to take care of itself, and in the frequent absence of proper care, it engenders merely a false feeling of security.

Animal charcoal yields phosphate of lime to the water, a medium suitable to the cultivation of germs, which it does not prevent from passing through its substance. Other filters are made of spongy iron, a mixture of iron, charcoal, and clay, of magnetic carbide of iron of polarite, etc., all of which are better than charcoal, though none of these is quite trustworthy, and all require care and renewal. Some of these act chemically as well as mechanically. The Pasteur-Chamberland filter can be trusted for a time to remove all suspended matter, including germs, so much so, that it is employed in laboratories in bacteriological investigations. But even it will, after a time, permit the passage of bacteria, and it is necessary at intervals to subject it to a high temperature to destroy the organic matter, which gradually gains access to its interior. This filter is composed of a form of Sevres porcelain baked at a great heat, and the water to be filtered is slowly forced through it at a high pressure and by a special arrangement. As quoted in this Journal for August, "Pasteur" filters were recently used during an epidemic of typhoid fever in Scotland, with the apparent effect of completely protecting those using the water prepared in this way. The conclusion arrived at a few years ago by the River Pollution Commissioners (England) was that all the methods of purification by filtration, whether carried out by water companies on the large scale, or by the consumer on his own premises, are inadequate to prevent the propagation of epidemic disease by water. An epidemic of typhoid fever at Lausanne, Switzerland, was caused by the use of water which had passed through the earth for half a mile after contamination, by which filtration fine particles of flour were removed, but not the living germs.

Distillation and boiling are the only sure methods of rendering a polluted water harmless. One soon becomes accustomed to the somewhat insipid taste of boiled water, or it can easily be aerated; in any case the actual security it brings against disease is well worth the slight discomfort; and this is true of milk, which inadvertently, through the washing of the cans, or intentionally, is apt to be mixed with water. Milk loses nothing in the process and gains in digestibility.

A MEDICAL OFFICER OF HEALTH FOR GEORGIA.

If one were asked to say what is the most useful branch of medical science, and would for the occasion lay aside a dislike to comparisons in such matters, one would emphatically reply, "Preventive Medicine," and would no doubt be telling the simple truth if reference were made to certain places. But for others this would scarcely hold good, because in them it is practically non-existent, and it is really true of only those districts in which the best possible work is being done in this connection. Preventive medicine, in a modern fulness of the word, is comparatively a young science; it has made immense and rapid strides; but it is only when we look into the vista of the future that we see it in the greatness which is its proper right.

Recent work shows more and more the tendency to look to prevention as the easiest and most potent method of ameliorating the suffering of mankind, for what else do all the novel preparations for inoculation mean? And how else has the death-rate in certain countries actually been so much diminished? Let us quote the *Journal of the American Medical Association* of September 12th:

"There is certainly no more astonishing and gratifying fact in modern civilization than the enormous decline and still progressively decreasing death-rate of the more progressive and best governed countries. We have in England a proof of the fact which, owing to the length of time over which they extend, and the accuracy of the statistics, brings the result clearly before the mind. Estimated by quinquennial periods the English death-rate per 1,000 from 1858 to 1895 was as follows: 22.22, 22.58, 22.42, 21.96, 20.79, 19.40, 18.90, and 19,04, respectively. In London alone, the largest civilized city in the world, the rate has been reduced to about 17, while certain districts of the metropolis have reached as low a rate as 14, 13, and even 12.

"In the United States, with less concentration of population in large cities, we must confess the shameful fact that human life is more recklessly and needlessly sacrificed to the brutality of politics and sanitary heedlessness than in older countries. It is nothing less than a disgrace that in our smaller cities, and with the injuries of bad hygiene less necessary, we yet are killing off our citizens at the rate of from 5 to 10 per 1,000 faster than in European cities. Think of what this means in a city the size of Greater New York! If her death-rate is 5 per 1,000 greater than it need be, one shudders to contemplate the many thousands of citizens needlessly murdered every year.

"In some of our cities the condition makes this fact still more evident and startling. Accurate figures are not before us as we write, but we believe that in a number of moderately sized cities the death-rate has been reduced to a remarkably low figure. It has lately come to our notice that in one of our cities, Buffalo, by the persistent and heroic labors of the energetic health officer, the rate has been reduced to 11.67."

These results should surely stimulate each country and each district to vie with one another in this most useful and friendly of rivalries, and when we turn our eyes inward upon our own condition in this matter, have we reason for jubilation or the reverse? To aid us in answering that question let us inquire how the death-rate has been reduced elsewhere, and notably in England, which has been the pioneer in this good work. There, we find a "Local Government Board" with a medical department composed of a chief medical officer and subordinates, possessing the power necessary for useful action, and maintaining a certain control over the doings of the local authorities of the numerous districts into which the country is divided, and their medical officers of health. These medical officers of health in all the large towns and in the counties are paid good salaries, are not allowed to do private practice, and must give all their time to the superintendence of their inspectors, and to themselves investigating the causes of outbreaks of disease, the sanitary condition of their district, and to seeing that the health laws which

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have been formulated by the central office are properly observed. Reports are forwarded at regular intervals to the head of the department, who keeps up, in different ways, communications with all parts of the country.

The system of employing men who are independent of every one except the government officials, which is coming into vogue in even the most rural districts, ensures the work being done more satisfactorily than when there are patients and others to be offended. There has been for some years going on in Britain a thorough training of doctors for this service, and they are encouraged, and in nearly all cases find it not only to their advantage but necessary, to possess a special degree or diploma in public health, which is given only after a certain time spent in college and practical work in connection with the subject.

Is there anything corresponding to all this in the State of Georgia? There are boards of health, but there is no proper correspondence between the two. But there ought to be some such system in operation in Georgia. It has frequently appeared to us that, while Americans are in most respects not less careful of their rights than the inhabitants of other portions of the globe, they have shown a strange disregard for themselves in the matter of health. They have allowed less than half-fledged physicians to gain experience on their persons, and in many parts of the country they have been content to dwell in very unsavory surroundings, to an extent unworthy of such a people. Let Georgia come to the front along with some of the other States, which are bestirring themselves for their own and their country's benefit. Let there be formed in the capital city of the State a central controlling board, and let each city and each district have its own medical officer, who shall be appointed only with the consent of this board, and be ultimately responsible to it. Let all this be absolutely and entirely separate from politics, and let the medical head be a man who has had a thorough training in the subject, theoretical and practical, no matter whether he hail from South, North, East, or West; only let him be efficient, and let him be encouraged to procure properly educated subordinates. This will cost some money at the outset, but every country that has experienced its benefits will assert that it is money well spent and is in the end a financial saving. Besides, money is not everything, and good sanitation is a right of the people as much as are the facilities for good education.

We hope that this matter will not be allowed to drop. We trust that some of the more influential among the physicians of the State will take it up and, by means of meetings or otherwise, have it thoroughly ventilated, laid before the legislature, and made a subject of importance there. We doubt the ability of the legislature to see at first much more than the financial side of the question, but what is the use of medical societies if they do not let their voice be heard in matters with which they are most competent to deal?

OCULIST OR OPTICIAN?

The *Journal of Medicine and Science* for August contains a good article by Dr. C. E. Norton, of Lewiston, Maine, upon the "Necessity of Having the Eyes Examined for Glasses by an Oculist." The writer very clearly points out that the optician is not the person to prescribe glasses. He divides present-day opticians into two classes: those "whose profession is the manufacture of glasses, which they make for patients only on the prescription from an oculist," and those "who make glasses and examine eyes, and pretend to fit glasses to them." It is this latter class which the patient should studiously avoid. Glasses are used to improve vision, either near or distant, or both; also, to preserve vision, and to relieve a variety of reflex functional diseases, particularly headaches. It is not necessary to enumerate the many causes of bad vision, which glasses, properly selected, are used to correct, and a knowledge of which the optician is not expected to possess and cannot possess. Because an optician makes and handles all kinds of spectacles and lenses, he is no more capable of prescribing glasses to correct refractive errors than a blacksmith is a proper person to perform a surgical operation.

"Or again, as a druggist keeps all kinds of medicine and compounds them with even greater skill than the average physician, it might be argued that the druggist, instead of the doctor, should prescribe medicines. But the fallacy of this argument every physician can see. The prescription of glasses is no more mechanical than the prescription of medicines. A physician may find it necessary to administer a cathartic, but it requires some skill on his part to know which cathartic best meets the indications in the case before him. In the same way, after the oculist has found and measured the optical error, it requires skill to know exactly what glasses should be prescribed in the treatment of the case."

The author impresses upon general physicians the duty of referring patients to a competent oculist, instead of the optician. His paper is a strong argument, and the several cases which he describes, illustrating the abuse of the optician's art, materially help to sustain his points.

THE SUBSCRIPTION PRICE OF MEDICAL JOURNALS AND THE SAMPLE COPY EVIL.

There is a striking variability in the annual subscription price of medical journals. Whether the $1.00 journal is helped by its price is a question. Many subscribers do not pay at all unless pushed. They are, in most cases, not dishonest, but simply negligent. If cash-in-advance were absolutely insisted upon, the $1.00 journal, if of any value, should excel the $2.00 journal in getting subscribers. The pay-in-advance rule, however, is not commonly enforced, and to "credit" many people makes one as cheap to them as the other—they pay neither.

Another difficulty with the subscription business arises from the idea, which is so prevalent, that a publication is able to exist upon its income from advertising. They forget that advertisers have no use for a journal with a "dead-head" subscription list. An honest publisher must have a *bona fide*, paid subscription list. The circulation liar is an important institution in the publishing world, and he often is able to get along without pay subscribers, but he has to hustle to keep from being caught.

At $2.00 per annum a journal of the size and quality of ours is cheap. We may make it $1.00 some day—if the doctors get other journals of equal value for $1.00, and if the subscribers all will pay. It is not what we charge, but what we collect, that has to be considered.

But the greatest drawback to the subscription business is the "sample copy evil." The writer received regularly every week a certain medical publication, properly directed, which he had never ordered and which it took three refusals to stop. That is the kind of circulation which many journals have. No kind of subscription price can meet a donation. An old friend of ours stopped The Journal because he was getting as many sample copies as he could read. A physician gets a sample copy of our Journal about once in seven months. We take care of the regular subscribers first, of the sample copies in proper order.

It seems to us that a thing should have some value, if it ever had, and that even a good thing cannot long be appreciated or received with self-respect if it is given to the recipient. The journal with a definite and just subscription price, should be more valued and more carefully preserved than the journal which is given away, or has a "cut" subscription price.

The rule of The Journal has been to please the subscriber first, holding the old and getting the new by this means, and to act justly and honestly toward advertisers, trusting to the genuineness of our subscription patronage to induce the patronage of advertisers.

M. H. B.

NOTICE TO SUBSCRIBERS.

Many of you will receive bills for amounts due for subscription. Please read what is printed on these bills and be governed accordingly.

M. H. B.

SELECTIONS AND ABSTRACTS.

SKIN DISEASES AND SYPHILIS.

EDITED BY DR. M. B. HUTCHINS.

TREATMENT OF SYPHILIS.

Dr. John Lindsay, of Philadelphia, read a paper upon this subject before the Alumni Association of Jefferson Medical College (September *Retrospect of Medicine and Pharmacy,* from *Therapeutic Gazette.)*

He justly says that no acid nor caustic application should be made to a sore on the penis because the inflammation thus produced may lead to error in diagnosis, or, if it be a true chancre, you do harm. (Cauterization is proper and beneficial in the case of a chancroid, if you can be positive that it is a chancroid; whereas it is not only useless, but positively injurious in the case of a chancre.) He advises cleanliness of the sore and a simple dressing, as with iodoform, calomel, aristol, etc. (For herpes a drying, soothing powder is sufficient; for chancroid, calomel, or calomel and bismuth; for a chancere, ung. hydrarg., diluted with zinc oxide ointment as required, acts excellently.)

He rightly advises that no specific treatment should be given until the appearance of secondary symptoms, and does not consider the diagnosis positive until these appear. (This is a good, safe rule and no time is lost by waiting, meanwhile getting the patient in the best possible condition. There are cases where the penile sore and the glandular enlargements are so typical that it is not necessary to wait for a skin eruption—which may never be clearly visible if it is a black negro—but these exceptions only prove the rule.)

He prefers giving the protiodide of mercury, because of its convenience and the patient's tolerance of it. He advises the gradual increase of the drug to the point of tolerance—to the physiological dose. Cut the dose then in half—the tonic dose—and keep the patient on it for eighteen months. (Of course the quantity given and the length of time it is continued will depend upon the condition of the patient, but his plan is good for a case which yields nicely.) Smoking, and a diet which may produce diarrhea, must be prohibited. (Chewing tobacco, the use of condiments, etc., also, injure the mouth.) After eighteen months he gives the patient a rest of a month and then begins "mixed treatment." He wisely says, do not use the bichloride with the iodide of potash, but always the biniodide of mercury, because you get in a mixture of bichloride of mercury and iodide of potassium an uncertain quantity of a newly formed biniodide of mercury. (Many prescribe the bichloride with the iodides, knowing that the biniodide will be formed, but it is better to have the biniodide to begin with for accurate dosage.) He advises the filling of the mixed prescription with compound tincture of gentian, rather than with syrup and water, to prevent gatric disturbance.

An intermittent treatment with the "mixed" is kept up, then, for six to nine months.

In the third year of the disease he gives iodide of potassium off and on. He thinks the patient pretty safe if no symptoms appear during the fourth year.

A simple, yet to many physicians unknown fact, he states in saying that mercury is the mainstay in the treatment both of early and late syphilis. Iodide of potassium is of value in the late stages, but chiefly assists in dispelling symptoms. (Mercury is the curative agent in syphilis, iodide of potassium simply removes symptoms. Antipyretics remove fever, they do not cure it—as witness typhoid.) He does not think it safe for a syphilitic to marry under three years after infection, better after four or five years, and only when the patient has been thoroughly and successfully treated with mercury.

The hypodermic use of mercury is desirable only in cases where the patient must be rapidly brought under its influence. (Of course no one should attempt the hypodermic method without a thorough knowledge of its technique.)

Drs. L. A. Stimson, A. G. Gerster, and B. F. Curtis, at a recent meeting of the New York Surgical Society, submitted the following report upon the use of erysipelas toxins in the treatment of malignant disease: "We believe that in the instances of apparent cure or marked improvement the correctness of the diagnosis is open to doubt. We, therefore, submit: 1. That the danger to the patient from this treatment is great. 2. Moreover, that the alleged successes are so few and doubtful in character that the most that can be fairly alleged for the treatment by toxins is that it may offer a very slight chance of amelioration. 3. That valuable time has often been lost in operable cases by postponing operation for the sake of giving the method of treatment a trial. 4. Finally, and most important, that if the method is to be resorted to at all, it should be confined to the absolutely inoperable cases."—*University Medical Magazine*, September. *Journal American Medical Association*, September 19, 1896.

Following are some tolerably well known prescriptions, reproduced from the *Monthly Retrospect* for September, 1896:

LOCAL TREATMENT OF BALDNESS.

Tinct. cantharidis...4 fl. drs.
Tinct. capsici.......1 fl. oz.
Ol. ricini..½ fl. dr. to 1 fl. dr.
Alcoholis, q.s. ad....4 fl. ozs.

M. Sig—Rub thoroughly into the scalp.

FEVER BLISTERS.

Camphor .... 5 grs.
Arrowroot, powdered ..30 grs.
Bismuth subnitrate....30 grs.
Cold cream............ 4 drs.

M.

FOR CORNS.

Painted on the corn night and morning for several days, when the corn will, as a rule, come readily away:—

Acid. salicylici......30 grs.
Ex. cannabis ind....10 grs.
Collodii...........4 fl. drs.

M.

PATHOGENIC GERMS IN THE SCALP.

Besides the germs to which "dandruff" and its products are due, it is known that the staphylococci also find lodgment in the scales of the scalp. This being true it is the duty of the "aseptic" or "antiseptic" operator, either to have his scalp in a perfectly clean and healthy condition, or to wear a close cap when operating. A few loose scales shaken from the hair could nullify all the usual surgical precautions. This suggests the fact that there is no part of the body which receives as little cleansing as the scalp. Many scalps only need soap and water, but a great number have reached that stage where they need thorough and proper medicinal treatment.

TOO MANY COLLEGES.

The *Tri-State Medical Journal*, St. Louis, has published some interesting data relative to the ratio between medical colleges and the population of the cities in which they are located. In cities having a population of less than 50,000, there is one college in Mobile (35,000), one each in Birmingham (27,000), Little Rock (42,000), Topeka (31,000), Sioux City (29,000), Kansas City, Kansas (40,000), Brunswick, Maine (6,000), Hanover, New Hampshire (2,000), Raleigh (15,000), Sewanee (1,200), Fort Worth (24,000), Saginaw, Michigan (44,000), and two each in Knoxville (24,000), and Keokuk, Iowa (17,000). Upon the data as presented by the *Tri-State Journal*, the *Lancet-Clinic* very properly remarks:

"If there is any one thing that the medical profession has been thoroughly convinced of during the past quarter of a century, it is the fact that in acquiring a medical education, clinic and anatomical facilities are absolutely essential, and such facilities to any extent are utterly impossible where there is a lack of population from which to draw material.

"Scan the list a moment, and observe a medical college in a town of 1,200, a place not large enough to support more than two physicians, who in the very nature of things cannot constitute a medical college faculty, and if every individual in the town were paupers would not furnish a modicum of clinic and anatomical material for teaching purposes.

Dartmouth, with its 2,000 population, largely constituted of college students, is a summer school. The faculty is made up of professors, who spend their vacations in the college village. The entire State of New Hampshire has not in it a sufficiency of clinic material for a medical college.

"So on, each one may be taken up in turn, and it will be found that local conditions are not such as to warrant the existence of a medical college in a single one of the cities and towns in the entire list.

"What may, and no doubt should, exist in some, but not in all of the towns in the list, is a preparatory medical school, where the two first years of the student's curriculum could be undertaken and carried on with manifest advantage. In those two years the student is not required to take up clinic study, except in the most incidental manner.

"From a considerable opportunity for observation, the writer is

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N. Y. P. G. M. S. a d H.
Not to Be taken
from this Room

convinced that it requires a city population ratio of not less than fifty thousand to support a medical school. First of all, it requires that many people to support a corps of physicians from which an acceptable medical college faculty can be drawn, and even then the probability is that some of the chairs would be filled with inferior timber.

"The lesson to be learned from the above table is that there are entirely too many medical colleges, that there is no demand for a creation of new colleges; while in some flagrant instances consolidations of existing schools should be brought about.

"Two snares and delusions in medical education in the United States have been what are known as spring and summer schools, and sundown colleges.

"In regard to the former, they were created for the special convenience of those who wanted to take short cuts to graduation, *i. e.*, a young man matriculating in a fall and winter school would matriculate, take out his tickets, be enrolled, perhaps attend lectures until the holidays, but even this sometimes shirked, he having all of his tickets. In January he would hie himself off to a spring and summer school, again matriculate, obtain his lecture tickets, so that in eight months he would get in two annual courses of lectures, the latter given in two different years. The same process entered upon in his second fall of study enabled him to graduate within a year and a half, ostensibly attending three courses of lectures apparently in three years.

"Men of medicine, and particularly members of State boards of examiners should have their attention directed to this iniquitous system."

PEROXIDE OF HYDROGEN.

Dr. Warren Brown, of Tacoma, Washington, in a paper on "Peroxide of Hydrogen," read before the Washington State Medical Society, and published in the *Medical Sentinel*, of Portland, Ore., February, 1896, after alluding to its method of manufacture, speaks of it therapeutically as follows:

Gonorrhea may often be aborted by using a full strength hydrogen dioxide injection immediately on the very first appearance of discharge. The injection should be used four to six times in twenty-four hours, and retained for five minutes.

Cystitis, where pus is voided with the urine, often yields rapidly to injections of a solution containing two ounces to the pint.

Otitis media is treated by hydrogen dioxide solutions in various strengths from 6 per cent. upward.

Eye diseases, where there is a purulent external inflammation, are constantly being benefited by this agent. The Wills Eye Hospital, Philadelphia, uses a 50 per cent. strength of the so-called 15 volume solution. Blepharitis marginalis is quickly cured by touching the edges of the lids once or twice daily with a strong solution, care being taken to avoid getting it into the eye.

Ulcers of all kinds improve rapidly under its use, and for treating and cleansing venereal sores, as chancroids, etc., it is of great service.

Empyema, especially where there is from the first a stinking sanious exudation following incision, is very satisfactorily treated by washing out the cavity with a solution from one-half to full strength.

In appendicitis, the abscess cavity is cleansed with this solution by many operators, in preference to any other antiseptic. Robert T. Morris, of New York, has laid special stress on the value of the peroxide in these cases.

In follicular tonsillitis, the use of a spray, diluted just enough to prevent the smarting sensation, and alternating with this, one of the alkaline antiseptic sprays, or gargles, is a very satisfactory procedure.

Diphtheria and all naso-pharyngeal inflammations where there is a pseudo-membranous and septic condition, have been treated very widely by means of this agent. I like the plan of Jennings, in Detroit, who uses an irrigation of an aqueous solution of one-eighth each of hydrogen dioxide and listerine. He throws the solution into the pharynx with an all-soft rubber syringe every one, two, or three hours. The plan is an admirable one for treating children, and the combination is pleasant and effective.

Atrophic rhinitis is benefited remarkably by the use of a 40 per cent. spray. It should be used a few minutes before the employment of the usual alkaline, stimulating spray, and the powder insufflations. In this way the scabs are loosened, muco-purulent secretions are dissolved, and a stinking breath is converted into one that is pure and sweet.

In acute cases of eczema of the leg, we find this agent of the utmost value. The tissues are inflamed, hot, swollen, and oozing, the itching is almost unendurable, the odor is offensive. To secure the best results the limb is elevated, and a diluted solution of the peroxide is applied frequently, with cheese cloth, gauze, or an atomizer. In two or three days a marked change for the better will be apparent, the pruritus is allayed, the purulent exudation is checked, and all inflammatory symptoms are subsiding. At this stage we begin the use of a soothing ointment, such as the boracic acid or zinc oxide, using lime liniment to wash the parts instead of water. Under this treatment, combined with rest, we will see our patient rapidly cured.

Eczema of the anus will rapidly improve if the fissures are touched twice a day with this solution, then dried gently with cotton, and a glycerite of lead application made. In nearly every form of acute eczema in the first and second stages the peroxide will give us the keenest satisfaction. The regular solution is diluted with two or more parts of water. Hydrogen peroxide is an excellent anti-pruritic, and for this purpose it is widely used.

The hemostatic value of this drug, as pointed out by Dr. Emerson Brewer, of New York, I can indorse. In operations on the nose and throat I have upon two occasions been enabled to check a persistent hemorrhage, when Monsel's solution and plugging had failed. At present I am in the habit of applying the full strength hydrogen peroxide after every operation on these parts. It is of special value after sawing out a deviated septum.

For flushing out a mammary abscess cavity this agent is invaluable.

Applied to the cervix uteri, adherent mucus is removed and our medication can be applied.

When it is inadvisable or impossible to make a complete opening of a fissure or abscess, irrigation with the peroxide will be found superior to all other antiseptics.

We have in peroxide of hydrogen a prompt, safe, and efficient germicide. By its oxidizing power it rapidly decomposes pus, diphtheritic membranes, and other morbid putrefying material. It is a thorough deodorizer, and as a cleansing agent for foul wounds, abscesses, etc., it has no equal.

Of the different preparations of peroxide, Marchand's has been most uniformly satisfactory.

Since writing the foregoing paper my attention has been called to hydrozone, a stronger solution of peroxide of hydrogen, which for some months I have been using with much satisfaction.

"AD-SUGGESTER" is the title of a booklet just issued by Nelson Chesman & Co., St. Louis, Mo. It contains about 250 "catchy" illustrations, applicable to advertising different articles. Nicely printed, in convenient form. Price 25 cents.

BOOK REVIEWS.

A MANUAL OF CLINICAL DIAGNOSIS BY MICROSCOPICAL AND CHEMICAL METHODS. For Students, Hospital Physicians, and Practitioners. By Charles E. Simon, M.D., Late Assistant Resident Physician John Hopkins Hospital, Baltimore. In one very handsome octavo volume of 504 pages with 132 engravings, and 10 full-page colored plates. Cloth, $3.50. Lea Brothers & Co., Philadelphia and New York, 1896.

The blood, the various secretions and excretions are all carefully considered in this book from the point of view of diagnosis, and a very important matter it is that physicians should be better acquainted than they generally now are with this subject, in which Simon's work should help to foster an interest, for it is clearly written and arranged, as well as copiously illustrated, and contains a vast amount of information. The publishers have also done their part well, and the result is a work which is heartily to be commended.

DIAGNOSTIC URINOLOGY. By M. D. Hoge, Jr., M.D., Richmond, Va., Professor of Histology, Pathology, and Urinology University College of Medicine, etc. pp. 81. Price, prepaid by mail, $1.00. To be had from the author.

This is a compact little book, much of which is arranged in tabular form and contains information for students and practitioners necessary in investigating the condition of the urine. It is a useful book to have at hand.

ANATOMY, DESCRIPTIVE AND SURGICAL. Henry Gray, F.R.S., Fellow of the Royal College of Surgeons; Lecturer on Anatomy at the St. George's Hospital Medical School. A new edition thoroughly revised by American authorities. From the Thirteenth English Edition. Edited by F. Pickering Pick, F.R.C.S., with 772 illustrations, many of which are new. Lea Bros. & Co., Philadelphia and New York, 1896.

Gray's Anatomy has been the standard for many years. The improvements which have been made in its text and illustrations in the past ten years are wonderful. If the old "Gray" was the best, the latest "Gray" is a double superlative.

This 1896 edition is simply an improvement upon the one of 1893. The sections on the brain, teeth, and purely abdominal viscera have been rewritten. The many excellent old illustrations have been retained and numerous new ones added. The illustrations of the peritoneal relations are especially striking. Cuts of special points in the anatomy add to the value of the book.

Especial attention, as heretofore, is given to the surgical anatomy and the dissections shown are remarkably clear.

A student once said that he could learn more from Gray's Anatomy than from dissecting. This would be true of the average dissector, if he used the edition under consideration. It is Gray's Anatomy vastly improved over the old Gray. M. B. H.

A Manual of Venereal Diseases. By James R. Hayden, M.D., Chief Venereal Clinic at the College of Physicians and Surgeons (Columbia University), New York; Professor of Genito-Urinary and Venereal Diseases in the Medical Department of the University of Vermont; Visiting Surgeon to the New York City Hospital. With forty-seven illustrations. Lea Bros. & Co., New York and Philadephia, 1896.

This is a concise manual, describing the symptoms and treatment of gonorrhea, chancroid, and syphilis. As necessary in a manual, the text is very concise and only gives the essentials in symptoms and treatment. The illustrations are chiefly of instruments, and the methods of their employment. The treatment and formula follow Dr. R. W. Taylor. It is a convenient reference book. M. B. H.

Jackson's Ready-Reference Handbook of Skin Diseases. The Ready-Reference Handbook of Diseases of the Skin. By George Thomas Jackson, M.D., Professor of Dermatology, Woman's Medical College of the New York Infirmary and in the University of Vermont; Chief of Clinic and Instructor in Dermatology, College of Physicians and Surgeons, New York. New (2d) Edition. In one 12mo volume of 589 pages, with 69 illustrations and a colored plate. Cloth, $2.75. Philadelphia, Lea Brothers & Co., 1896.

Dr. Jackson is one of the most thoroughly learned of the dermatologists in the literature of skin diseases, as is shown by the text of this book. The matter has been brought down to date, several new diseases receiving notice. The text is extremely brief, as is to be expected in a small work. The alphabetical arrangement of the diseases is followed, as in the first edition. Illustrations are for the most part good. M. B. H.

PTOMAINS, LEUCOMAINS, TOXINS, AND ANTITOXINS, OR THE CHEMICAL FACTORS IN THE CAUSATION OF DISEASE. By V. C. Vaughan, Ph.D., M.D., and F. C. Hovy, Sc.D., M.D., of the Uinversity of Michigan. pp. 558. Published by Lea Brothers, Philadelphia.

The popularity of this work is proven by the appearance of a third edition. The importance of chemistry in relation to disease is daily becoming more marked, and a knowledge of this relationship is of value to the practitioner as well as to the public health officer in his investigation into the origin of outbreaks of disease. This book enters thoroughly into the researches which have been made in different countries in connection with food poisons, the bacteria of many of the infectious diseases, and the action upon them of blood serum. It considers the subject of immunity, antitoxins, and general serum therapy, as well as the methods of isolating ptomains and toxins, their chemistry and their resemblance in action to various well known poisons. In these days, when the hopes of the profession for the ultimate cure of some of the more deadly diseases lie in the region traversed by this work, a careful study of it cannot but well repay the reader.

The publishers have done well their part of the work.

THE FUNDUS OCULI. By Adams Frost, F.R.C.S., Ophthalmic Surgeon, St. George's Hospital; Surgeon to the Royal Westminster Ophthalmic Hospital, London. Young J. Pendland, Edinburgh and London, and McMillan & Co., New York. Price, $18.00.

Mr. Adam Frost has for years been giving several courses of lectures during the year at St. George's and at the Royal Westminster Ophthalmic Hospitals, on the fundus of the eye in health and disease, illustrated by magic lantern slides. These lecturers are most interesting and instructive, and the present book is an amplification of them. From long acquaintance with a great part of this work before its publication, the writer can bear witness from personal knowledge to the immense amount of care which was expended upon it during its years of preparation. That this care has been expended to full advantage will be admitted by all who use the book, whose text, which contains in a most readable form all information concerning the various appearances of the fundus, and is printed in large type and on thick paper, is illustrated by 107 beautifully colored plates, besides numerous other illustrations of great value. The whole forms a book which must take its place as one of the most valuable, if not the most valuable, which has ever appeared in connection with this subject.

PARK'S TREATISE ON SURGERY. A Treatise on Surgery. By American Authors. Edited by Roswell Park, M.D., Professor of Surgery and Clinical Surgery, Medical Department, University of Buffalo, Buffalo, N. Y. In two very handsome octavo volumes, comprising about 1,600 pages, with about 800 engravings, largely original, and about 40 full-page plates in colors and monochrome. Volume I., General Surgery and Surgical Pathology. Volume II., Special Surgery. Price per volume, Cloth, $4.50; Leather, $5.50. *Net.* Lea Brothers & Co., 1896.

The contents of volume I. are divided into five parts, surgical pathological, surgical diseases, principles and methods and minor procedures, injury and repair, and surgical affections of the tissues and tissue-systems. These subjects are fully and carefully dealt with, and remarkably well illustrated. Indeed, the illustrations comprise one of the most noticeable merits of this volume; they are numerous and well executed. Among those which have specially attracted the writer's notice are illustrations dealing with accidents from anesthetics and the test methods for their prevention and relief, a subject to which Dr. Hare, the writer of this section, has given much attention. Each section of this book having been written by a surgeon specially chosen on account of intimate knowledge of the subject allotted to him, it is needless to say that it contains work of only a high order, and that the student and practitioner will find full and accurate information in its pages on the surgical questions with which it deals.

SPECTACLES AND EYE-GLASSES. Their Forms, Mounting and Proper Adjustment. By R. J. Phillips, M.D., Adjunct Professor of Diseases of the Eye, Philadelphia Polyclinic, etc. Second Edition. P. Blakiston, Son & Co., 1012 Walnut Street, Philadelphia. Price, $1.00.

This little book is "intended to supplement studies in refraction, and to give the student that knowledge of the correct placing of the glasses before the eyes, without which the most painstaking measurement of the refraction will frequently fail of practical result." Systematic works on ophthalmology and refraction frequently omit all discussion of the mechanical aspect of glass-fitting and adjustment. The author has succeeded in this book in presenting this subject in a very clear and practical manner. Oculists will find it a useful supplement to their works on ophthalmology. The contents embrace a description of the material and manufacture of lenses, the principles of spectacle fitting, the prescription of frames, the adjustment of spectacles and eye-glasses, the different patterns of spectacles, etc.

We have received of Prof. Chas. Marchand the eleventh edition of his book upon his medicinal agents and their numerous uses in the diseases due to micro-organisms. The subject is very thoroughly treated, and various quotations are made from writers.

The book can be obtained of Professor Charles Marchand, No. 28 Prince Street, New York. M. B. H.

REMINGTON BROTHERS' NEWSPAPER MANUAL, 1896.

We have received the ninth issue of the Newspaper Manual of Remington Brothers, of Pittsburgh, Pa., and New York, N. Y.

The contents include complete lists of all newspapers in the United States and Canada, with their days of issue, politics and circulations, and properly classified lists of the principal Dailies and Weeklies, and the best Agricultural, Religious, Scientific, and Trade publications and leading Magazines. All the lists are catalogued by towns in alphabetical order, and in the general list the population is given of each town and of the county in which it is located.

The Manual contains a vast quantity of valuable information, concisely arranged, and is handsomely and substantially bound. As a book of reference it must prove invaluable in every business office, as well as to every one doing business as an advertiser.

Sent by Express, prepaid, on receipt of $3.00.

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ORIGINAL COMMUNICATIONS.

THE EVOLUTION OF MODERN MEDICINE.

INTRODUCTORY ADDRESS DELIVERED AT THE OPENING OF THE SIXTY-FIFTH ANNUAL SESSION OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF GEORGIA, OCTOBER 1, 1896.

BY JOSEPH EVE ALLEN, M.D., AUGUSTA, GA.
Professor of Obstetrics and Pediatrics Medical Department University of Georgia; ex-President of Augusta (Ga.) Academy of Medicine, etc.

Throughout all nature, in the world of mind, as well as in the world of matter, the law of evolution is universal. Its wondrous working is seen in the long succession of organic forms that culminate in the curious and complex mechanism of the human body, and its action can be traced in the progress of society from rude and uncouth barbarism to the refinement and culture of enlightened civilization. The present perfection of the arts, and the grand achievements of the sciences are all resultant from this all-pervading law of gradual development. Even in matters spiritual its operation is apparent, for a comparative study of religions shows that man in his conceptions of divinity has advanced by gradations from the grossest anthropomorphism to the most sublime ideality.

Evolution is now no longer to be regarded as the dream of cracked-brain visionaries, or a theory advocated only by advanced scientists. It is a fully established law of nature, resting upon the same truth and capable of the same demonstration as the other laws which govern the universe. I propose on this occasion to point out the influence of this law in medicine, and to study those causes and conditions which in the past have conduced to the growth of our science and the improvement of our art, and which operating in the future hold out the certain assurance of grander and more glorious attainments. The subject of my remarks to-day is

THE EVOLUTION OF MODERN MEDICINE.

All sciences, says Compt, pass through three stages of development; first, the theological; second, the metaphysical; third, the positive stage. To this rule the medical sciences are no exception. Medicine originally was an important part of religion. Among all primitive people the office of priest and physician is always exercised by the same individual. This is true alike of the nations of antiquity and of savage and semi-civilized races now living on the globe. The connection of the priestly class with the healing art is due to the fact that when man reaches that degree of mental development that enables him to take cognizance of natural phenomena, his first impressions being ill-defined and almost always erroneous, he sees the miraculous in everything that transcends his experience or which he does not understand. Disease, which is so mysterious in causation and course is always attributed to the anger of a god, or the malice of a demon, and hence, in sickness, aid is sought of those persons who are supposed to have power over the supernatural, and to be able to propitiate the one, or checkmate the other. In the lower grades of society where all that is occult is at once charged to the caprice of beings like, though greater than man, the treatment of the sick is simply a resort to various kinds of exorcism. Modern travelers tell us that among the Indians, Tartars, Africans, and other semi-civilized races widely separated from each other, similar ideas exist as to the cause of disease, and like means are employed for its cure. Thus the medicine man, the llama, and the witch-finder endeavor to cure, by making the body of their patient intolerable to the demon that possesses it, by carrying on the most disgusting, alarming, and even painful performances. The sick person is subjected by them to dreadful sounds, fearful grimaces, and horrid odors, and is drenched with the most infernal mixtures. This idea that the efficacy of a medicine is dependent upon its repulsive qualities still survives among more enlightened people. You will find among your patients many that will value your medicine just in proportion as it is nauseating and disagreeable. A negro never thinks medicine is medicine unless it is bad to take.

From tablets, inscriptions, and other monumental remains that recent exploration has brought to light, we find that the healing of the sick by the casting out of devils was taught by the great religions of Egypt, Assyria, India, and Greece, as well as by Hebrew and Christian theology, and that the same power over disease was claimed by the priests of Osiris and Isis, of Gibil, and Æsculapius that is said to have been exercised by the priests and prophets of Jehovah.

The practice of medicine among the early Egyptians was confined to a certain order of priests who were called, in the papyri, "Masters of the Secrets of Heaven." This was a movement toward specialization, although disease was regarded as a demoniacal possession to be cured by amulets, charms, and prayers. The Prisse papryus, the oldest writing extant, is a treatise on medicine, and is a heterogeneous collection of incantations and prescriptions. The great progress that the Egyptians made in hygiene and preventive medicine under the later Pharaoh is shown by the sanitary code of the Jews, which was derived from this source. According to Herodotus Egyptian medicine in his day was entirely separated from religion, and had become highly specialized, as each department was in the hands of special practitioners, such as aurists, oculists, bone-setters, etc. On this subject, however, the Greek historian is not trustworthy.

The views of the ancient Hebrews on medical matters were not in advance of the nations around them, for in the Scriptures there is ample evidence of their belief in the supernatural origin and cure of disease. In the Old Testament the leprosy of Miriam and Uzziah, the paralysis of Jeroboam, the syphilis of Job, the dysentery of Jehoram, and the ills of many other worthies are attributed to the wrath of God, or the enmity of Satan. While in the New Testament a number of like cases are recorded, such as the sunstroke of Saul, the catalepsy of the daughter of Jairus, the epilepsy of the Gadarenes, etc. St. James positively tells us in his Epistle that the prayer of faith will save the sick. By this primitive mode of thought, this credulous grasping after the miraculous, must be interpreted the many marvelous cures that have come down to us recorded in Holy Writ.

Greece was the birthplace of scientific medicine. Here the idea of the supernatural causation of disease soon gave place to more exact knowledge.

In the temple of Æsculapius the sick were received to obtain assistance from that God. This divine help was given free of charge, but patients who recovered often, out of gratitude, made gifts to the shrine and erected votive tablets setting forth the symptoms and other particulars of their diseases. Accurate histories of cases were also kept by the priests, and it was from the study and comparison of these valuable clinical records, rather than from the celestial oracle, that guidance was obtained in the treatment of those who applied for relief. The Asclepius or Temples of Æsculapius, were devoted to both religious and medical uses, being medical schools and hospitals as well as sanctuaries.

Five hundred years before the Christian era, in the golden age of Grecian history, the struggle in medicine between science and theology began, which was continued down to the present day. The man who rose superior to the superstitions of his time and struck the first blow for liberty in science was Hippocrates, a priest of the Asclepius of Cos. Boldly he attacked and overthrew existing traditions, and laid the foundations of scientific medicine so firmly and broadly upon the impregnable principles of reason and experience that they can never be shaken and will endure forever. His works are still models of professional genius and acumen, and he will be ever venerated as the father of medicine. Hippocrates combated the theological doctrine that disease was brought about by gods or devils, and asserted that it was always due to natural causes, and was to be met only by such remedies as were dictated by observation and experiment, and not by prayers and sacrifice. Thus began that permanent separation between priest and physician that has since borne such good fruit. The memory of Hippocrates was maligned by the religious party of his day, and the charges of impiety and infidelity, that have always been heaped upon reformers of every age were made against him and his disciples. Truth, however, always prevails, and the incontrovertible logic of results has been their full and sufficient vindication.

Greece had at this time so advanced that her ancient faith was altogether inadequate to satisfy the intellectual needs of the people. The religion was fast passing away that had inspired the poet, the sculptor, and the warrior to the performance of achievements that will ever remain among the most precious possessions of mankind.

A new era of thought was dawning, in which a recognition of the supremacy and sovereignty of law in the universe supplanted the chaos and confusion incident to belief to the caprices and arbitrary acts of innumerable divinities. This spectacle, often presented in the course of history, the dying out of a faith which in its day was the hope and trust of multitudes of men, is truly pregnant with suggestion and full of the most solemn import. This radical change in public opinion was inaugurated by the philosophers and physicians. The new medical philosophy contributed so much to this result, exerting, as it were, the force of a divine revelation, that the enthusiasm of Galen is almost justified when he declares that the words of Hippocrates should be reverenced as the voice of God.

The great museum of Alexandria, founded by Ptolemys Soter and Philadelphus, was the cradle of the medical sciences. Here, by patient investigation, nature, to use the quaint expression of Lord Bacon, was put to the question, and the first great discoveries in science made. In the medical school connected with this institution anatomy was recognized as the true basis of the healing art, and dissection, not only of the dead, but of the living, was practiced. The vivisection of animals and condemned criminals was here authorized by Ptolemy, who justified this apparent inhumanity by the plea that, as the culprits had already forfeited their lives, it was no injury to make them useful to the interests of society. Herophilus and Erasistratus were the great lights of the Alexandrian school, and for centuries their authority directed the course of medicine. Christianity exerted a most tremendous influence upon the evolution of medicine. For the first time in history charity became a cardinal virtue. In the early church it was the bond of unity, and was inculcated as a duty paramount to all others. The zeal for charity that possessed the first Christians manifested itself in the founding of hospitals, asylums, benevolent orders, etc., institutions utterly unknown to Pagan social economy. Then as now woman, ever responsive to the appeals of the suffering and distressed, was foremost in all philanthropic enterprises. The first public hospital was erected in Rome, during the fourth century, by Fabiola, a wealthy Roman matron, and was soon followed by hospitals in other cities, in the organization of which the Empress Helena was especially prominent. Thus a woman's sympathy, moved and guided by the world, contributed greatly to the promotion of medical science, and is one of the chief blessings of civilization.

The first hospitals and medical charities were directed by bishops and administered by deacons. This ecclesiastical control of the hospitals and the sick for a long time hindered the advance of medicine. Educated physicians were set aside because their philosophical tendencies and liberal ideas were opposed to the theology of the state, and credulity, imposture, and ignorance had full and undisputed sway. The religious dogmas of the day enforced belief in supernatural interventions, and reliance was placed in miracle, shrine, and relic cure rather than in rational medical practice. Diseases were treated entirely by saints, bones, charms, prayers, etc., remedies on a par in value with the fetishes of the African, or the totems of the Indian. The conflict between theology and scientific medicine that began in the days of Hippocrates was truly a struggle for existence during the sixteen hundred years following the conversion of Constantine. The final and lasting victory of science has just been gained in this the nineteenth century, and is a demonstration of the eternal verity of the survival of the fittest.

A dispassionate study of this conflict between science and theology is necessary to the proper understanding of the evolution of modern medicine. Theology has ever been the great stumbling block in the path of science. Religion must not, however, be confounded with, and held responsible for, the mistakes and shortcomings of theology. Theology is simply an expression of the opinions and conceptions of a group of individuals about religion. It is, therefore, ever in a state of change or evolution. Religion is constant, it is the bond that binds man to the great first cause of all creation. An impulse that permeates all nature and raises humanity nearer and nearer to the great ideal of all perfection. The faith of a people is always that to which they are mentally and physically suited, and changes with their growth in knowledge and intelligence. Men improve in their ideas of religion in direct ratio to their progress in brain development. It is entirely wrong to think that creeds are priestly inventions. The theological views of a people are the products of many underworking natural causes, the principal causes being intelligence, heredity and environment. The great agency that has refined and purified theology is science. Ever since St. Paul warned Timothy against the oppositions of science, falsely so called, there has been a great deal said about the warfare between science and religion; and with some people the term scientist has become synonymous with atheist and sceptic. Between religion and science there can never be conflict because the subject-matter of each lies in entirely different planes of thought. Science deals with phenomena altogether within the range of experience. Religion contemplates that which transcends experience, yet both science and religion meet and fully agree in the fact that the power that is manifested in the universe is forever incomprehensible to the intellect of man.

The man of science may be unable to accept current theological opinions, and yet be profoundly religious. The records of our profession are full of accounts of physicians who were regarded as atheists and infidels, and yet, whose lives of heroic devotion and self-sacrifice for their fellow-men make them the peers of any holy saint or blessed martyr that ever lived.

The adoption of Christianity by the Emperor Constantine arrested the progress of scientific medicine for nearly one thousand years. He and his immediate successors despised all learning, and repressed and stifled every form of intellectual activity; their rule plunged the world into the very depths of moral and social degradation, and ushered in the night of the Middle Ages. After his conversion Constantine, by edict, closed the Asclepius, where medicine was cultivated, prohibited the study of philosophy, destroyed the libraries and works of art and endeavored to eradicate every trace of ancient culture and civilization. The doctrine that the Bible was the sum of all knowledge, and revealed everything that was proper for man to understand, was universally accepted and effectually arrested all investigation in the field of the physical sciences and prevented advancement and discovery. A period of over sixteen centuries, a dismal blank in the history of medicine, separates Hippocrates from Paré, Herophilus from Harvey, Galen from Sydenham. It can scarcely be rightly estimated what the gain to humanity would have been had the mental activities of this period been directed to scientific research, instead of wasted in worthless theological discussion and metaphysical speculation. Many of the questions that now perplex us would have long been answered and discoveries that lie yet far in the future would have been made.

During this period the shrines of the saints were crowded by the sick and afflicted, just as the temples of Æsculapius were thronged in former times. The god had only changed his name, the worshippers were the same. It was a time of intense feeling, fierce antagonisms, and the most benighted ignorance; a time of blood and of fire, of scaffolds and stakes and instruments of torture; liberty of conscienc and freedom of speech were unknown, and the earnest seeker after truth, whether in science or religion, often fell a martyr to his enthusiasm. But for the rise of Mohammedanism all the wisdom of the ancients would have been lost forever to the world. The Arabian caliphs were ardent cultivators of learning, and especially active in the encouragement of science. This enlightened policy stands out in bold relief against the system of repression practiced by their Christian contemporaries. Under their liberal rule all the great philosophers, mathematicians, astronomers, and physicians of medieval times flourished. Thought was free and unshackled, and a man was at liberty to learn and believe whatsoever he chose.

Wherever Saracen conquest reached the physicians were the leaders of thought and the medical schools were the centers of intellectual enlightenment.

From the study of medicine by the Arabians many other sciences, such as chemistry, botany, and metallurgy, were developed. The Arabians acquired much of their knowledge of medicine from the Nestorians and the Jews. These outcasts of Christendom found under the protection of the Crescent the security and encouragement so necessary to scientific pursuits. They gave especial attention to the investigation of the structure and diseases of the human body, and were noted for their skill and learning as physicians. Jewish and Nestorian physicians founded the celebrated medical school of Djondesabour, the first college to institute the system of academic degree which we still have to-day. They also founded universities at Damascus and Bagdad, and in Moorish Spain. Thus they were the medical teachers of the Moslems and afterwards of Christian Europe. To the persecution of these heretics by Christian fanatics, therefore, science owes the rich treasures of Arabian learning.

Although the Arabians were generally liberal in their views, and favorable to the free expression of thought and opinion, still there were bigots and religious fanatics among them as well as among other nations, as is evidenced by the treatment accorded to Averroes, the greatest philosopher and physician of the eleventh century, who was for years subjected to great persecution, and even, at one time, was forced to sit upon the steps of a mosque in Cordova, to be spit upon by the faithful because of his scientific opinions.

Jewish physicians were always prominent in the cause of medical education. They founded, in 1140, the first medical school in Europe, the School of Salerno, and subsequently the Medical College of Montpellier. During the middle ages they were much sought after because of their great ability, and although they were under the ban of the church, and cursed as infidels and unbelievers, still they were often the trusted friends and attendants of princes, prelates, and even popes. To their everlasting credit be it said that the influence thus acquired was always exerted for the betterment of mankind. The eminence of Jewish physicians was only attained after a hard struggle with ecclesiastical authority within the bounds of their own faith. The Levites claimed the divine right to heal the sick by prayers and expiatory sacrifice, and only surrendered this prerogative after the most obstinate resistance. The beginning of the separation of the priest from the physician in Judaism is first noted in the book of Ecclesiasticus, which, though apocryphal, reflects correctly the ideas of the age in which it was written.

The evolution of scientific medicine has been one continuous struggle with dogmatic theology. For two thousand years no new principal in medical philosophy has even been proposed, or advance in practice advocated, without meeting with the most determined opposition from persons speaking in the sacred name of religion.

Theologians have always regarded the progress of science with the greatest antagonism; this is because of the many assaults that scientists have made upon their interpretations of nature, and the fear that perhaps sooner or later all that they hold as necessary to salvation may be swept away. Criticism and examination only more firmly established the truths of science, while many of the most cherished doctrines of theology have been disproven and shown to be erroneous by the advance of knowledge. From age to age this conflict has gone on. In every contest science has been the victor and theology has been forced to give up one after another of its positions, but has defended those that remain with undiminished tenacity, and, defeated at last, has always been ready with a plausible compromise.

The progress of science, however, no matter how dangerous to religion some of its stages may have seemed for the time to be, has invariably resulted in the highest good both of religion and science. The truth of this is fully illustrated in the history of medicine by the contests over miracle cure, demoniacal possession, the practical study of anatomy, the use of anesthetics, the treatment of the insane, public sanitation, etc.

MIRACLE CURE VERSUS MEDICINE.

Under all religions persons who have been great benefactors to their race have always been credited with miraculous powers of healing; this is true of Brahmins, Buddhists and Mohammedans, as well as Christian saints. Belief in these cures were formerly unquestioned and sustained by the most ridiculous and incompetent testimony. Every church and town in Christendom had its miracle-working relics, holy well, or grotto, to which the sick flocked in multitudes for cure. Over ninety per cent. of the afflicted prayed at these shrines without avail, yet faith was not disturbed. Those cures that were effected were clearly the work of the imagination, as were those worked in more recent times by John Wesley, Schlatter, Ivan, and others. This fetishism, which for ages obstructed the advance of rational medicine, was based on, and sustained by, scriptural authority, for was not Naaman cured by a bath in the river Jordan? Were not those healed who touched the bones of Elisha? Did not St. Peter, by faith, raise the cripple at the Temple gate, and why could not other blessed waters and the bones of other holy persons be just as efficacious? Relic and shrine cure was insisted on as a religious duty, and the biblical case of King Asa, who died because he trusted in the physicians and not in the Lord, was often quoted with great unction in its support. The delusion of miracle cure was gradually dispelled by the rise of secular medical schools, such as those of Salerno, Montpellier, Bologna, etc., and the introduction of Arabian learning through the Wars of the Crusades.

The passage from miracle to medicine was very slowly effected, for these superstitions were deeply rooted in the minds of men, and only given up with the greatest reluctance. The discoveries that brought about this result were, first, those in biology relating to the mechanism of the human body; second, those in pyschology showing the connection of the mind with the body, such as the influence of the imagination, the effect of hypnotism, suggestion, hysteria, etc.; third, those in pattology and bacteriology bearing upon the nature and causes of disease.

THE GENESIS OF SURGERY.

Surgery, which is to-day one of the foremost of the medical sciences, in the early stages of the evolutionary process was altogether distinct from the practice of medicine. In the beginning the doctor was an entirely different personage from the surgeon. The first was supposed to treat ills that were of supernatural origin, while the other cured those afflictions, the causation of which was obvious. The doctor's practice was confined to internal diseases which were attributed to divine displeasure, demoniacal possession, etc. The surgeon treated wounds and other injuries received in battle, the chase, or through accident. In the middle ages when medicine was altogether under the control of the church, ecclesiastics did not perform surgical operations, but simply superintended those done by assistants who were laymen, because the church law which prohibits the clergy from shedding blood prevented them from using the operating-knife. In the fifteenth century the practice of surgery was a despised and disreputable calling, left altogether in the hands of the barbers, and was so neglected that many dignitaries in church and State perished for the want of the simplest surgical operation. To the labors of Paré, Vesalius, and Harvey is due the impulse that through succeeding ages has brought about the present high status of the science and art of surgery.

DEMONIACAL POSSESSION AND THE TREATMENT OF THE INSANE.

To the teachings of St. Paul is due the first infusion of pagan ideas into Christianity. To him the gods of the heathen were real beings, for in his Epistle to the Corinthians he says that "the things which the gentiles sacrifice, they sacrifice to the devil and not to God." Based upon this the belief became general that diseases, especially those of the brain, were a kind of demoniacal possession. This belief in the devil and his workings in the physical organism of man is supported by overwhelming scriptural evidence and by the unanimous authority of the early fathers of the church

The Reformation did not altar in the least the views of the people on this subject, for since the day of Luther who said that "Satan produces all the ills that afflict mankind," down to the humbuggery of faith-cure, Christian science, etc., of our times, Protestantism has always held and encouraged the idea of the supernatural origin of disease. By the dictim of theology lunatics were for nearly two thousand years treated by exorcisms and punishments. They were chained in foul, dark dungeons, flogged, starved, and prayed over; for it was thought highly meritorious to inflict pain on these poor wretches, because by so doing the devil that possessed them was tormented. Although science has, ever since the days of Hippocrates, asserted that madness was a physical ailment, it was not until the end of the last century that this inhumanity was arrested. In 1792 Piner struck off the chains from the lunatics in the hospitals of Paris and inaugurated a new era in the treatment of insanity. Science has cast Satan out of the lunatic asylums and will soon run him off the face of the earth.

THE DECLINE AND FALL OF CHURCH RULE IN MEDICINE.

In Christendom the emancipation of medicine from ecclesiastical control did not take place until a late period. At first the treatment of the sick was altogether in the hands of the clergy, some of whom, notably the Benedictine monks, became quite celebrated for their skill in medicine. As late as 1452 physicians in France were not permitted to marry, because they were considered as belonging to the clergy, and in Henry VIII.'s reign no person could practice physic in England without examination and license from the Bishop of London, or the Dean of Paul's, duly assisted by the faculty. The Archbishop of Canterbury had the latent right to grant medical diplomas up to the opening years of the present century. The separation of the soul-curer from the body-curer, the priest from the physician, was brought about at last by the general enlightenment of society following the invention of the art of printing. Before this time it is true that the practice of medicine by ecclesiastics had fallen into discredit, and various church councils had condemned it as irreligious and highly atheistical; declaring it to be the greatest impiety to seek relief in other than those supernatural means that religion had made so abundant and easily accessible. When the craze for relic cure was at its height, invalids went the rounds from one shrine to another, just as they go to-day from one specialist to another, and from one sanitarium to another. Certain relics for a time were more fashionable than others, and some would rise in popularity for a period and then relapse into innocuous desuetude. Some relics cured one disease and were not good for another. Thus St. Gall cured tumors, St. Christopher throat diseases, and St. Remy fevers, etc. The growth of medical knowledge after a time enabled physicians to cure diseases that relics could not reach. The success was at once attributed to the assistance of the devil. And even as late as the seventeenth century, when the Town Council of Hall in Württemberg gave privileges to a Jewish physician on account of his admirable skill and ability, the clergy of that city joined in a protest, stating that "it were better to die with Christ than be cured by a Jew doctor aided by the devil." As people became better educated the true value of science was more and more appreciated, until, at last, church rule in medicine has passed away forever.

THE BATTLE FOR DISSECTION.

The study of anatomy by dissection was in Europe for centuries proscribed by Christian ecclesiastical authority. This opposition to dissection was probably inherited from earlier times, because the mutilation of the dead was held as desecration and sacrilege by all ancient religions. Even the old Egyptians who considered the embalming of the body necessary to its resurrection, still despised the embalmer and his art. This prejudice against dissection was, however, in a great measure overcome by the influence of the Alexandrian school, and at the time of the conversion of the Roman Empire to Christianity anatomy was extensively cultivated as an important branch of medicine. The doctrine that the human body was made in the likeness of God and was the temple of the Holy Ghost caused the early Christians to condemn dissection, and when in the eighth century the formula of Marcellus, now known as the Apostle's Creed, was adopted as orthodox belief, supplanting and contradicting St. Paul's view of the resurrection, the cause of anatomy received a stunning blow from which it did not recover for hundreds of years. It was argued that injury to the body might in some way prevent its rising on the day of judgment, and that hence its dissection was a crime deserving of punishment here and hereafter.

The struggle for anatomy began in the thirteenth century when the heretic Emperor Frederick of Germany granted his physicians the privilege of dissecting the human subject. Before this time the universities of Bologna, Salamanca, Paris, and possibly some others, taught anatomy by using apes and monkeys as dissecting material, a very good substitute seeing how near these animals are related to the *genus homo*. In 1391 the University of Lerida was allowed to dissect one dead criminal every three years. Paracelsus, in the early part of the sixteenth century, did much to prepare the way for the proper appreciation of anatomy. The discovery by Servetus of the lesser or pulmonary circulation was, however, the first great advance. This man perished a victim of religious fanaticism, for he, together with the book containing the proof of his great discovery, was burned at Geneva in 1553 through the machinations of that greatest Protestant reformer, John Calvin. It was Andreas Vesalius, in the sixteenth century, who won the battle for science and founded modern anatomy. Single-handed and alone he fought the good fight. Despising ridicule and slander and opposition, ostracised by his professional brethren and excommunicated by his church, he labored on, regarding not the peril nor the sacrifice. Carried away by enthusiasm in his science, he renounced all the pleasures of life and to obtain subjects for study lived among the gibbets and the tombs. With dauntless heroism he defied alike the fires of the inquisition and the contagion of the plague, until finally borne down by persecution he fell a martyr to science and humanity, and left a name and an example that will be forever a stimulus and an inspiration to laborers in the cause of truth. From the time of Vesalius dissection has been everywhere recognized as a necessary part of a medical education, but only within the last twenty-five years have the senseless laws been annulled that prevented the getting of anatomical material.

The medieval anatomists wasted a great deal of time looking, without success, for a hypothetical structure known as the resurrection bone, which was supposed to be a bone imperishable and imponderable, that was to form the nucleus of the new body on judgment day. During later times the special object of anatomical search was for the seat of the soul. The brain and heart were the fields for the particular inquiry. For a long time the soul was supposed to reside in the pineal gland; afterwards it was asserted that its habitat was the hippocampus minor, and this was the generally received belief among theologians until Huxley disproved it, by showing that this structure exists in the anthropoid apes as well as in man. The seat of the soul is still an anatomical *terra incognita*, and is likely to remain so.

FETISHISM VERSUS SANITATION.

The security and protection afforded against infectious and contagious diseases is one of the great triumphs of modern medicine. In ancient times, and even down to very recent periods, nations were often visited by fearful epidemics that wrought havoc and devastation and swept off thousands of victims. By both pagans and Christians these pestilences were attributed to the wrath of God, against which vain was the help of man. They were regarded as scourges only to be averted by prayer, fasting, and offerings. On the appearance of an epidemic repentance and atonement for sin were preached, and no effort was made to arrest the spread of the disease by the adoption and enforcement of the most obviously necessary sanitary measures. The belief in the supernatural cause of epidemics checked and paralyzed scientific effort and resulted in terrible mortality. The loss of life was enormous, and was entirely due to the neglect of proper hygienic precautions. In Europe during this period the masses lived crowded together in filth and wretchedness, and in the habitation of the rich no attention was paid to sanitation or cleanliness. In the cities garbage was allowed to accumulate in the streets and sewage and drainage was unknown. The earthen floors of the dwellings were often one mass of decomposing organic matter, affording an inviting culture-field for every variety of pathogenic germ, and it is not to be wondered at that with such favorable surroundings these germs should have multiplied and flourished, notwithstanding the prayers and supplications of the faithful. The reason for this state of things was because filthiness was considered by the early Christians as a repudiation of heathenism, for the old Greeks and Romans having learned, at great cost, the importance of cleanliness to public health, enforced it as a religious duty. During the middle ages the idea became prevalent that abuse of the body secured the salvation of the soul. This encouraged the tendency to ignorance and sloth that is inherent in human nature and led to the production of dirty personal habits that greatly facilitated the spread of epidemics.

Sometimes other means besides fasting and prayers were employed to arrest epidemics. In 1522 in Rome, the center of the Christian world, thirty-two years after the discovery of America, an ox was sacrificed in the Colosseum, to the heathen gods in the hope that by propitiating them the plague that was then raging might be stayed. During the epidemics known as the black death the Jews, owing to the observance of the sanitary laws laid down by Moses, frequently escaped the disease. This immunity was at once attributed to the especial protection of the devil and the effort was made to stop the epidemic by torturing and murdering that unoffending people. Plagues were often supposed to be due to witchcraft, and thousands of innocent men, women, and children were executed as the witches through whose sorcery these diseases originated. This was a very favorite method of stopping epidemics, justified by the scriptural injunction, "Thou shalt not suffer a witch to live."

But for the theological bias the real cause of the spread of epidemics would have soon been recognized and understood, for often it was very near to being discovered. Thus in ancient times contaminated water supply was frequently charged with being the source of these diseases, but this was soon lost sight of, and the idea of supernatural causation was generally accepted. At last men gradually awakened to the truth of John Wesley's maxim, that "Cleanliness is akin to Godliness," and realized that the sin for which infectious and contagious diseases is the punishment is the unpardonable sin of filthiness.

In our time knowledge has so advanced on these subjects that the carriers of contagion are now known by all to be material in character, and we hear nothing of visitations, scourges, inscrutable providences, etc., in this connection. The labors of Jenner in the last century, and of Charles Chadwick in this, have contributed greatly to the education of the people, which has resulted in the control of epidemic diseases.

As an illustration of present opinion on this subject two recent incidents may be cited. Thus, when Lord Palmerston, who was then Premier of Great Britain, was requested by the Scotch clergy to appoint a fast day to ward off the cholera, he refused, and told them to go home and clean their streets. And the present emperor of Germany, in the face of a similar emergency, forbade prayer-meetings because they diverted people from the employment of proper sanitary measures.

Statistics conclusively show that fifty years of scientific sanitation has done more to prevent disease and death than fifteen hundred years of prayer and religious observance. If, therefore, science has accomplished so much, may we not reasonably hope that through its further progress, not only plagues and pestilences, but such diseases as typhoid fever, phthisis, diphtheria, pneumonia, etc., will also soon be banished from the earth.

We are now living in an epochal period in the history of medicine. A period marked by wonderful improvement in diagnostic precision, by a great advance from empiricism to positive therapeutics, by astonishing results in surgery through asepsis and antisepsis, by fruitful and far-reaching discoveries in bacteriology and pathology, by rapid progress in sanitation, hygiene, and preventive medicine, and by increased knowledge in every branch of the healing art.

It is not these achievements, however, laden though they be with manifold blessings to mankind, that will distinguish the closing years of the nineteenth century. The achievement that rises far above them all, and which in the future offers the possibility and the assurance of great and permanent advancement is this, that medicine has, at last, in every department thrown off the yoke of mystery and superstition, and faces the new era forever free and untrammeled by the chains of dogma and tradition.

USEFUL MEDICATION IN TYPHOID FEVER.

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State Board of Pharmacy, Etc.

Years ago I remember hearing the late learned and beloved Dr. H. V. M. Miller say in a lecture on typhoid fever:

"Young gentlemen, when I practiced medicine up in the mountains, I had much typhoid fever to treat. My territory was very large, and many of my patients I did not see but three or four times during the course of the disease. On being called for, the first time I usually found my patient with pains in the back and limbs, headache, loss of appetite, coated tongue, flushed face and fever. I can't give you the temperature, for in those days the clinical thermometer was not used. I gave a good dose of calomel, saw that they had a bottle of turpentine, inquired about the supply of milk, but seldom asked about whisky, for of that there was always an abundance. I gave directions about diet, the use of cold water when temperature rose (the coal-tar antipyretics were then unknown), and turpentine if the bowels became tender or tympanitic, and whisky if the pulse became feeble or collapse was threatened. I then left, with instructions to send for me if any complications came up. Looking over my cases, I find that I lost only a little over eight per cent. of my typhoid fever patients.

"When I moved from the mountains to the more thickly settled country, where the doctors saw their patients every day, I noticed that the mortality increased to twelve or fifteen per cent., and some of the very active doctors *saved* eighty per cent. of their typhoid fever patients by active medication.

Last winter, while at the Johns Hopkins Hospital, I heard that prince of clinicians, Dr. Osler, say to his ward class while standing beside a typical case of typhoid fever: "Gentlemen, about eight per cent. of all such cases are doomed—they have been called. About eight more depend upon the doctor and nurse for life, principally the nurse; four more will stand a good deal of doctoring, and eighty per cent. will recover in spite of the doctor, unless he uses the coal-tar antipyretics too freely."

Now, with such authorities and many others against medication, it may seem almost presumptuous to start upon a regular system of medication, but Dr. John E. Woodbridge has had the temerity to work persistently on this line, and, judging from his frequent reports to the various medical associations and articles in the *Journal of the American Medical Association,* his efforts have been crowned with success.

We are told in the Scriptures to "Prove all things, hold fast to that which is good," and this is one precept of the Bible, I believe we all try to follow, though what seems "strong as proof of Holy Writ" to some minds, appears to others "trifles light as air."

It was my good fortune to have served ten years as pharmacist before studying medicine, and during that time, and since, to be intimately associated with Dr. Enoch Callaway, one of the most accomplished therapists and successful general practitioners I have ever seen. Together we have worked out many new combinations of drugs, he furnishing the therapeutics and I the chemistry necessary for their proper preparation. He made the following prescription to use in a case of typhoid fever, where the temperature was very high, but the heart complications rendered the use of the usual antipyretics dangerous :

℞ Ammonii carbonatis.. 8 gm. (ʒ ii.)
Acidi salicylici..10 gm. (ʒ iiss.)
Elix. pepsini lactat.,
Aquæ cinnamomi, āā.......................................60 cc. (℥ ii.)
M. Sig.—Teaspoonful in a little water every three hours.

Here we get the antipyretic and antiseptic effects of the salicylate and at the same time the stimulation of the ammonium carbonate. The lactated pepsin and cinnamon water enable the stomach better to tolerate the salicylate and prevent it interfering with the digestion. Experience now with 100 cases* shows a marked diminution in complications and unpleasant sequelæ. Tympanites, hyperpyrexia, diarrhea, and nervous symptoms are much less frequent than before the use of this prescription, and only three deaths in 100 cases covering five years; so that it cannot all be attributed simply to a mild epidemic.

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* The majority of these cases occurred in the practice of my colleagues, Drs. E. Callaway and E. A. Cason.

My experience with the Woodbridge treatment, while fairly satisfactory, has been that the temperature does not fall after the bowels are moved, as claimed by its originator, but by supplementing it with the elixir salicylate ammonia, I have little trouble with hyperpyrexia.

Now, I don't claim to avert typhoid fever by the use of this prescription, but I know, from clinical experience, it does relieve the patient of many distressing symptoms from which they formerly suffered; and, in combination with Woodbridge treatment Nos. 1 and 2, the fever assumes the mild or abortive type. In 66 per cent. of the cases where used, the temperature has reached normal by the fifteenth day.

A word about having this prescription filled. Be sure to caution your pharmacist to use only the translucent lumps of ammonium carbonate. Dissolve them in the cinnamon water, then add the salicylic acid, and lastly the elixir of lactated pepsin.

A FEW REMARKS PERTAINING TO DIAGNOSIS AND TREATMENT OF ORDINARY EAR AFFECTIONS.

BY F. PIERCE HOOVER, M.D.,

Lecturer in Department of Otology, New York Polyclinic; Assistant Surgeon Manhattan Eye and Ear Hospital, New York City.

It is not my intention to go into the details of the diagnosis and treatment of *all* affections of the ear, but in as few words as possible to suggest a few points which I trust will be of use to some one.

One of the most common complaints is deafness, with or without pain, noises of one kind or another from an accumulation of wax in the ear. To cleanse it out seems simple enough, but requires careful manipulation, and one must be sure *wax* is present; otherwise the drum membrane will likely be ruptured by the pressure of water syringed against it. Never use cold water in the ear; oily substances avail little but are commonly prescribed.

The instruments *all* physicians should have for ordinary everyday use are a head mirror to reflect rays of light into the ear through a speculum; it can be used by putting it on the head with a band or with a handle to hold it; a nest of three specula, either made of rubber or metal as you prefer; the former break more easily than the latter but have the advantage of not being tarnished by acids touching them; a small cotton applicator and pair of forceps; and lastly a syringe; the best is of metal with a long nozzle, which enables us to wash the entire external canal, which a blunt nozzle syringe will not do usually.

Chronic Catarrh of the Middle Ear, Otitis Media, Catarrhalis Chronica.—Patients complain of noises in ears which they have had for a longer or shorter time, sometimes temporarily stopping, but usually continuous; also they may complain of deafness, and occasionally they will say they feel at times dizzy. Should you, after diagnosing the case, be asked if your patient can be cured, it would be the best answer to say, see a specialist. These troubles may last for years; sometimes they are incurable and there is very little satisfaction in treating them. Inflation should be tried, either by holding the nose tight and shutting the mouth tight and blowing (Valsalva method), or using the Politzer bag. Should there be a nasopharyngitis or any nose or throat trouble, attention should be given the same at once.

Acute Catarrh of the Middle Ear, Otitis Media, Catarrhalis Acuta.—Patient complains of severe pain in the ear. In many cases of old-fashioned "earache," upon looking in the ear a boil (furuncle) will be found causing the mischief, or there may be granulatious or polypi in the ear, or if one is accustomed to examining ears, a puffed out spot on the drum membrane may be noticed, and if so, this is an indication of pus being back of the same and pressing against the drum, causing pain. As soon as a small opening is made, viz.: paracentesis, by the doctor, with a fine small knife-blade, or the membrane ruptures itself, then relief comes frequently instantaneously. If you are afraid to use the knife and wish to hurry the membrane to free itself of pus, order quite warm water syringed in the ear and have a hot water bag or a linen bag filled with hot salt kept in contact with the ear all the time. This will not only feel most comfortable to the patient, but will ease the pain and many times induce sleep. Of course a sedative should be given if required.

Acute suppurative otitis may be the result of an acute catarrhal trouble. The ear discharges pus. Always after cleansing out the canal have the ear inflated so as to force out any pus that may be posterior to the drum membrane. Wipe out this, then with a pledget of cotton on an applicator dipped in a 40-grain nitrate silver to 1-ounce water-solution, touch the ruptured spot on drum. This treatment, if possible, should be done two or three times a week, and the patient should wash the ear out three times a day with warm water and use peroxide of hydrogen after doing so. *Never*, in these acute cases, use boric acid, either in solution or powdered form. Eczema of the ear is frequently the result of irritation, by scratching the ear with a pin, fingernail or hairpin, and sometimes is the result of a running ear, blood disease, etc.

Local applications two or three times per week of tincture of iodine direct to the affected part, or the use of oxide zinc ointment, I prefer, or touching the same with nitrate of silver, or dusting with borax powder. Keep as dry as possible (not using water to the ear) and the eczema will soon get well. Chronic suppurative otitis media is in my experience more often met with than any of the aforementioned diseases, and, as a rule, very good results are obtained in a comparatively short space of time; that is, if the patient can come for treatment *three* times a week, and will diligently persevere in carrying out instructions at home. After washing out ear look for the cause of the discharge; should granulations be seen scrape them out with a small wire curette made expressly for the purpose. Sometimes these granulations are *behind* the drum; possibly polypi may be seen, and if small can be scraped away with the curette, or pulled away, if large, by a pair of forceps. Best use a 4-per-cent. solution of cocaine in the ear to alleviate the pain before operating. The after-treatment is nitrate of silver, which I use in strength from a 40-grain to 1-ounce solution upwards. Boric acid can be used three times daily, or peroxide of hydrogen. I would not advise any one to attempt to operate beyond the drum unless he has done considerable ear work.

Mastoid trouble should be referred to a specialist or a surgeon to be operated on, and where there is swelling back of the ear, marked tenderness upon pressure, and pain, the sooner the knife is used the better.

Ménière's disease and diseases of labyrinth I will not dwell upon; they should at once be sent to a specialist.

Before closing let me add a few words more. Pain in the ear is not always from the ear, but may be the result of either decayed teeth or neuralgia. *Always* examine the former when seeing a patient for the first time who complains of severe pains in the ear; sometimes the removal or filling of a tooth will cure the complaint.

143 West 45th Street, New York City.

ABSTRACT OF CASES REPORTED AT MEETING OF TRI-STATE MEDICAL ASSOCIATION, OCTOBER 12 TO 15, 1896.

BY R. R. KIME, M.D.,
ATLANTA, GA.

CASE 1.—A unicervical septus uterus with abortion from right side; fetal structures had passed off, the decidual structures retained, infected; removed them, disinfected and drained. Right side measured three and one-half inches in depth, left side, non-gravid, measured one a half inches in depth.

CASE 2.—Uterine hemorrhage, eight days after delivery, due to typhoid fever commencing at labor. Uterus had to be tamponed for a period of three weeks, changing every one to two or three days, as demanded by symptoms. The tampon each time had to be quickly replaced to prevent patient bleeding to death.

CASE 3.—One of placenta previa centralis, with infection before delivery, which had been having hemorrhage four or five days when first seen. Immediately delivered by podalic version; peeled off placenta, irrigated and disinfected uterus, dressing patient antiseptically. Within two days symptoms of infection returned with renewed vigor, with severe pain and elevated temperature, which the physician in charge tried to control by morphia and phenacetin, to no avail. Visiting patient again, the author immediately administered salines, irrigated, disinfected and drained uterus, and in a few hours patient was comparatively easy; no more opiates or coal-tar derivatives given. The drainage (tubular) kept up six days, at which time patient was practically convalescent.

CASE 4.—Tumor and infection complicating labor. Infection treated by irrigation and tubular drainage, tumor disappearing by absorption. Patient examined a year afterward and no evidence of tumor, which was probably a fibroid, and situated in posterior wall of uterus.

CASE 5.—Was one of extreme septic intoxication, seen ten days after labor, in which the utility of tubular drainage was demonstrated. When tube was removed, constitutional symptoms returned, which could only be controlled by reinserting tube. Gauze failed to meet the indications.

ARTIFICIAL LOCAL ANEMIA IN SURGERY.*

BY F. VON ESMARCH.

F. von Esmarch, the distinguished surgeon and discoverer of "bloodless operations," in an address on this subject made on the occasion of the 25th Jubilee Congress of the German Society of Surgery, held at Leipzig, May 27-30, 1896, said:

GENTLEMEN:—Our honored president has requested me, as senior member of our society, to deliver the initial address of this convention, suggesting at the same time that the subject of such address should be "Local Anemia."

Since I have upon different occasions, both in your presence and before other conventions, dealt with this subject, and moreover not having as a matter of fact much of a new nature to disclose, I shall confine myself, in order to infuse some interest into my attempt, to

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*Translated from *Centralblatt fur Chirurgie*, August, 1896.—ED. (pro tem.)

the task of handling it in perhaps a more able manner than heretofore.

I had the privilege, some twenty-three years ago, of communicating my discovery to you, but I did not then state the circumstances which led to its possibility, so that if you will permit me to refer to the past, you may not consider it a trespass on your attention if I now relate such circumstances to you.

By many persons, we surgeons are considered as being gruesome, bloodthirsty, and unfeeling. This is in direct contradiction of our nature. I shall assuredly be in sympathy with your feelings when I assert that a good surgeon must possess a compassionate disposition, and that it is precisely on account of our being thus constituted that we select a profession calling for the noblest instincts of humanity. What is it that stimulates our untiring energies oft into far declining age, if it is not the desire to alleviate the sufferings of our fellow men? If love for our neighbors is the first and foremost principle of the laws of Christianity, then verily we surgeons are better Christians than many of those who profess to call themselves such. I am one among you who accepted the responsibilities of our profession, and I have felt a profound satisfaction in its humane privileges.

But there have always been three crying evils which embittered the exercise of our calling. These are:

First. The pain occasioned to the patients by operation.

Second. The danger to which lives are exposed (infection) by operations.

Third. The *loss* of blood which unnecessarily follows.

I am happy I have lived to see these three evil conditions, if not entirely, yet in a high degree, removed, and that I have been able to assist here and there in combating them.

Some fifty years ago, as a student, I had witnessed many a bloody operation in Göttingen and Kiel; had even, as Bernhard Langenbeck's assistant, given practical aid to the same, when in the year 1846 there came from America the joyful tidings of Morton's discovery of the properties of ether as a narcotic.

Who has not lived to see it, can in no way conceive the exultation which then seized the doctors, and more especially the students in all surgical clinics.

Where heretofore the operating-rooms had been filled with screams and moans of the unfortunate patients, by the impress of which many a novice had been brought to a state of unconsciousness, now suddenly all was still, even deathly still, save interruptions only occasioned by wandering mutterings, even some times by joyful songs proceeding from the subject.

The discovery made a rapid tour of triumph over the entire globe, and was as quickly followed in 1847 by a new one, that of Simpson, which proved that chloroform had a more rapid effect in producing *narcosis* than ether. Thus it quickly superseded the latter. During the first Schleswig-Holstein war chloroform was introduced in Langenbeck's clinic, where its priceless value was fully realized and appreciated. Since then it was for some years extensively used in the clinic of Kiel until ether again came into use, and has since retained its sway.

Not so easy was the victory obtained in the field of infectious wounds, which threatened the hurt in battle and those operated upon and made the name of "Lister" immortal; and where is the surgeon to be found who is not especially grateful for the ever continuously increasing benefits that are derived from asepsis? benefits which Lister prophetically proclaimed in these words: "The treatment of wounds had the object of hindering the development of decomposition in a diseased part. When the fulfillment of this problem shall have been reached, then shall, indeed, surgery be viewed in a different light from heretofore. Diseases and wounds looked upon in a despairing, nay hopeless, light, will, on the other hand, have a steady and assured convalescence, and thus this new observation will become the polar star, whose light will guide our vessel over the desolate sea."

The third crying evil which has in all times attacked the progress of science and increased its difficulties was the unnecessary loss of blood. The diminution of such during operations has always been regarded by surgeons as of the utmost importance. Otto Weber, in his classical work on Histology of Diseases, refers to the treatment of hemorrhages, especially the stay of the flow of blood in an open wound, as being the root of surgery. The history of blood-staunching, he says, thus becomes the history of our science and may be adopted as the record of its progress or retrogression.

From the commencement of my surgical activity, during the many operations I have performed, this question has always been foremost in my thoughts, and as Langenbeck's assistant, I had many opportunities to strengthen my constant interest. Langenbeck had always twelve artery forceps prepared to seize each spouting vessel immediately upon cutting, and placed especial value on well waxed silk thread, as also the rapid, tight knotting of the same. As his assistant I have spent many a night in preparing the thread to be used the following day, for at that period we did not have the aid of benevolently disposed sisters.

When the first Schleswig-Holstein war broke out, I lost my advantages as assistant to my early instructor, having been made a prisoner of war during the first engagement. But when a cessation of hostilities was called, Langenbeck being summoned to Berlin, Stromeyer was appointed his successor as staff surgeon-general of the Schleswig-Holstein army. I then resumed my opportunities to put my knowledge to practical use, for Stromeyer frequently selected us young doctors (Langenbeck's pupils) to perform operations, and it became my duty to bind the bleeding arteries. Since we often found ourselves with an insufficient supply of waxed silk thread, I appealed to the ladies of the Central Aid Society in Kiel, who forthwith provided us with large quantities, and thus prepared the way for an unlimited supply furnished to our army surgeons in the following campaigns, till in the war of 1870–1 catgut superseded thread.

When later on in 1854, I became the head of the surgical clinic, I increased the number of artery forceps to forty, for which I frequently found use in important operations.

I was led to this step by a case that came under my notice when operating in 1852, upon a man of sixty-one years, who had a lipoma, a fatty tumor, weighing fifty-six pounds, whose broad base hung from the nape of his neck, the weight of which became unbearable.

With youthful ardor I applied myself to the task of its removal, but found myself confronted by several serious obstacles. Immediately following the first incision of the knife came a copious flow of blood which brought our twenty forceps into requisition and necessitated first of all the binding of all the vessels. But during this time the strength of my assistant gave out and two others were called to assist him in raising the weight of the tumor. Then suddenly I heard it said, "The pulse is gone; the patient is no longer breathing!" Chloroform asphyxiation had taken place, as the patient had to be laid on his stomach, so that it was only after much labor that we turned him on his back and by artificial respiration brought him back to life.

It was not until this had been accomplished that I was able to resume the operation, which I continued by separating the heavy mass of the tumor completely from the body by a rapid cut, using the whole of my forceps again and again, whilst my assistants were stemming the flow of blood with broad sponges. After rapidly inserting a few stitches, we finally succeeded in placing the man on his bed, but he never recovered himself again. Rigors ensued, and he succumbed to "pyemia" in a few days.

Had I to perform such an operation to-day the patient would lose but a small quantity of blood. In fact, Woefler, in 1878, amputated a tumor of the neck weighing fifty pounds with the most satisfactory results by means of "local anemia."

. . . .

The most important operation I performed was that on a young girl on whose thigh a tumor of immense proportions, "elephantiasis teleangiectodes," had grown. Experience had taught me that those veins and arteries entering into the tumor may be greatly expanded or widened. I therefore experimented in the following manner in order to minimize the loss of blood:

I had two wooden splints made, provided at equal distances with holes. Having attached these firmly to either side of the base, I introduced in these holes a strong silver wire and drew them through by aid of long needles in an oblique direction, two of which I twisted together. The overlapping portions of the thigh I then bound firmly with iron wire. Proceeding then to cut the great tumor above the splints, I made a long wound of forty centimeters, and closed it by a number of deep and superficial stitches of silver suture. Only a small quantity of blood was lost during this long operation.

You will have observed by what I have said that I have been on several occasions in close contact with my discovery of local anemia, but the thought itself only really ripened in February, 1873, and in the following manner:

I was requested one evening by a lady to withdraw her wedding ring from her finger, which owing to a contusion had suffered a severe swelling. I have no doubt in my mind but that you are all acquainted with the course to pursue in such cases.

It is usual to bind the finger tightly from the point to the ring with strong thread, passing the end under the ring and then removing the thread by a quick effort whereby the ring passes easily over the shrunken finger to the point.

The lady, much pleased by the result, begged me to explain the process to her.

Intimating how, during the process of binding, the finger had first become white, then red, I easily explained the cause, namely, that the blood had been driven out of her finger by the pressure of the binding process, and that consequently the dimensions of her finger had decreased considerably.

After she had left my thoughts dwelt for a long time on this process, amusing myself the while by binding my finger first with thread, then with thin rubber thread in different directions, observing that by means of the cotton each subsequent trial occasioned a more unpleasant effect. I dreamt of it all that night. Awaking the following morning, suddenly the ripe thought appeared to my internal vision: *From now on you must before every operation press the blood out of the limb, and not permit it to enter again until the operation is completed.*

Then my thoughts turned to the future, and I pictured the many difficult cases where my discovery would be brought to bear as a blessing to mankind.

Naturally I felt very happy. On the same day I removed a pieec of collar bone, and on the following did an "exarticulation" of the hand, as also several scrapings of carious bones—all these without loss of blood—and was each time surprised how much easier these operations became under treatment suggested by my discovery than before.

I was also most anxious to communicate my discovery to my colleagues, in order that its benefits might reach mankind as speedily as possible. The holidays were at hand, and with them the second surgical congress, where I delivered my first address on the production of local anemia.

It was my own fault if I did not succeed in making any good impression, for I neglected to prove my subject by living illustrations or intelligible plates, but I felt discouraged, nevertheless, when I found that no attention was paid to it subsequently by any of my colleagues, a proof that the thought had not excited a corresponding enthusiasm, as Stromeyer said. However, some consolation I found in the hope that perhaps one or the other would eventually try the experiment and understand the worth of its knowledge.

In the following summer I performed a number of operations with exceptional results, among others, along with my then assistant, the present Prof. Peterson, the removal of two sequestra on both tibiæ without any loss of blood. These I subsequently illustrated in Volkmann's clinical addresses, No. 58.

During the following autumn the army surgeons' exhibition was held in Vienna, when I amputated two thighs and made a resection with artificial local anemia in the presence of surgeons of all countries, who then carried the tidings of the discovery to their homes.

In the preface of his classical work on "Neurasthenia," George Beard very correctly says: "Every new thought penetrating into the world passes through three periods before being fully and unquestionably accepted by the profession:

1. The period of indifference.
2. The period of negation.
3. The period of priority."

My discovery passed through the first period quickly, for already in the course of the same year many eminent surgeons (Billroth, Langenbeck, Bardeleben, Brandis, Albert, Leisrenk, MacCormac, Simon, Stokes, etc.,) raised their voices in its favor, discussing its advantages with more or less enthusiasm.

To this period soon succeeded the remaining two.

From all sides, especially from English, French, and Italians (Grandesso, Silvester, Clover, Chiene), came the assertion that long before my discovery this or that surgeon had adopted the means of binding the limbs to be amputated, or had raised them, and also that the practice of binding with india-rubber bands was an old story.

To this I agreed, not however without intimating that I had myself practiced and taught the method of binding and raising the condemned limbs, without however possessing the knowledge that not alone Brueninghausen, but surgeons of the sixteenth century, had practiced the same methods.

I was however in a position to argue that this was a matter not altogether confined to amputations, but that the importance of my proposition, the entirely novel, and as yet never propounded idea, was that we surgeons, whenever possible, should prevent the loss of blood, and that we are in a position to effect this by binding and tying so that the blood would be driven out exactly as we want it. One of our colleagues experienced an amusing deception. He volunteered the information at the following congress that bloodless operations had been in fact performed two hundred years ago, and had been commented upon by an anatomist named Bils. His experience had been explained by one Olans Barrichius under the title: *De Bilsii artificio incruentæ sectionis*, etc. (*fieri sanguine in aliam corporis partem compulso, ibiqui vinculis injectis retento*, etc.), and had furthermore been lauded by Albert von Haller in his Bibliotheca Anatomica, T. I., p. 495, 1774.

My surprise was expressed that the method of those surgeons had not been regarded, and was even entirely forgotten. Keeping the drift of those writings before me until I discovered and obtained the desired key of information from our University library, I then found that Bils had made a totally different discovery and description of it. He had, in order to show his pupils the branching of veins in the limbs, compressed the blood-vessels of animals as if for venesection, and then had exposed the enlarged or dilated vessels by means of the fingers and knife in a slow and careful manner, without injuring a single blood-vessel.

These claims gradually subsided; still at the same time opinions were advanced that showed the many dangerous disadvantages to which my discovery might lead. Even warnings were included, whilst my colleagues advised a discontinuance of such a process, and desired a return to the old method of the "tourniquet" or digital compression. Above all, it was asserted that injury to the compressed nerves, even decay of the edges of the wound often took place, and that on the whole it would be better to ignore the discovery altogether.

It has been my untiring effort to increase the practical effects of my discovery, and from time to time at our different congresses I have asserted that the disadvantages which were alleged against local anemia originated not in the procedure itself, but in mistaken practice. More especially does this lie in binding the rubber tube too tightly or in the too speedy removal of the bandage.

Nevertheless these reproaches drag themselves from one pamphlet to another, and from one edition to another, in opposition to "local anemia," and show that the authors have never taken the trouble to acquaint themselves with the improvements that have been added in the original discovery.

. . . .

Expulsion of blood from one portion of the body to another portion has produced so many beneficial results that its advantages can scarcely be doubted any longer. Thus I live with the conviction that "local anemia" has the unquestioned right to be regarded as one of the most important adjuvants of practical surgery and that as such it will retain its influence.

DR. GONIN, of Lyons, sends a note to the Paris Academy of Medicine, recommending formol for mosquito and gnat bites; also for bites from small animals. The bites should be covered with formol by a small brush or the surface of the cork of the bottle containing it. After evaporation the formol is again applied. The soothing effect is instantaneous; there is never any inflammation. M. Gonin asserts that formol is efficacious for serpent and scorpion bites.—*British Medical Journal.*

CORRESPONDENCE.

NEW YORK LETTER.

NEW YORK, October 16, 1896.

Since my last letter signs of returning activity in medical and surgical circles have become more and more in evidence. The most prominent medical men have returned from their vacations and have resumed their posts in the colleges and in the clinics; medical societies are again in session, and the colleges are now in full swing.

It will be a pleasure to any one who is interested in medical teaching to visit the College of Physicians and Surgeons. Through the munificence of the Vanderbilts this institution now enjoys almost unlimited facilities, so far as wealth, apparatus, and clinical material are concerned. It is now the foremost medical school in this country. Seven years ago the college erected handsome new buildings at the corner of Fifty-ninth street and Amsterdam avenue, and within the last two years the capacity of all these buildings, including the college proper, the Vanderbilt clinic, and the Sloane Maternity Hospital, has been doubled. It is well worth one's time to spend half a day at least in these buildings to see how a modern model medical school should be conducted. The college is now about to inaugurate a thorough postgraduate course, for the instruction of practitioners in all branches of medicine and surgery. It goes without saying that it will be as complete in its way as the undergraduate school. The postgraduate department will probably be opened within a year.

Last evening I attended a meeting of the ophthalmological section of the Academy of Medicine. The general subject for discussion was the Relations of Diseases of the Eye to General Diseases. The first paper was read by Dr. J. H. Claiborne upon The Effects of Extrinsic Poisons on the Eye. In other words, Toxic Amblyopia. Following the suggestions of Dr. Casey A.

Wood, he divided these amblyopias into two general classes: (*a*) those produced by poisons which directly affect the optic nerves, and (*b*) those which are not accompanied by optic nerve or retinal lesions. In the first class the most important and frequent toxic agents which we encounter are alcohol and tobacco. It is the frequent drinker, one who drinks regularly every day, rather than the occasional heavy drinker, that is more liable to alcoholic amblyopia. With both alcohol and tobacco there is a great difference in persons as to susceptibility to these poisons. Aside from the general indications of chronic alcoholism patients with alcoholic amblyopia will complain of a misty vision and usually consult the oculist for glasses. Examination will usually show a white optic disk, especially on the temporal side. There may be some hemorrhages in the retina. Central scotoma, or color-blindness at the macula, is an early and important symptom. Tobacco amblyopia is commonest between the ages of forty and fifty. It is caused by both chewing and smoking, and it has been seen among snuff-dippers. The stronger the tobacco used the greater the liability. Dr. Claiborne had seen two cases which were caused by cigarettes, though these patients also indulged freely in alcohol. The use of tobacco and alcohol so often go hand in hand that it is not always possible to know which is responsible for the given case of amblyopia. The ocular symptoms and appearances are not sufficiently unlike for a reliable differential diagnosis to be made. In amblyopia from both poisons the first essential, of course, in treatment is total abstinence. This will effect a cure in many cases. Others will require certain drugs which will either stimulate the optic nerve or arrest the degenerative processes, such as bichloride of mercury, iodide of potash, strychnine, digitalis, pilocarpine, etc. The author mentioned among the other less important drugs of this class which may cause amblyopia by optic nerve lesions, cannabis indica, arsenic, lead, quinine, iodoform, salicylic acid, male fern, iodide of potassium, etc.

The other class of poisons produces amblyopia without any retinal or optic nerve lesions. These are: (1) agents which dilate the pupil, such as belladonna or atropine, cocaine, hematropine, hyoscyamine, scopolamine, etc.; (2) those which contract the pupil, such as opium, eserine, pilocarpine, etc.; and (3) those which produce irregular visual disturbances, as santonin, aniline, naphthaline, picric acid, ergot, etc.

In concluding his excellent paper Dr. Claiborne stated that the possible visual effects of such drugs as may cause amblyopia should be well borne in mind by the practitioner.

Upon the discussion of this paper Dr. Herman Knapp called attention to the fact that persons with alcoholic or tobacco amblyopia become prematurely presbyopic. In his experience tobacco amblyopics had always begun the use of tobacco early in life, before twenty. Persons beginning the tobacco habit later in life are not so liable to it. Dr. Knapp reported a case of amblyopia from coal-gas.

Other interesting papers were read by Dr. C. J. Kipp, on The Infectious Diseases of the Eye, and Dr. W. A. Holden, on The Visual Disturbances due to Nervous Diseases.

At the Brooklyn Eye and Ear Hospital a few days ago I witnessed an operation for an old middle-ear and mastoid suppuration, which presented more than the usual points of interest. The patient's trouble dated from surf-bathing, July 4th. This produced an acute otitis, accompanied by pain; paracentesis was performed by some aurist, and a discharge continued for three weeks. For the next two months there was no further discharge, only pain in the affected half of the head, and finally vertigo, occasional vomiting and increasing weakness. The physician who was attending the patient at this time did not seem to realize the gravity of the case. When he came to the hospital, September 23d, there was no trace of mastoid tenderness, no pus in the canal, but marked drooping of the postero-superior canal wall. Vision and eye-grounds normal, and for twenty-four hours after pulse and temperature were normal. Then symptoms of meningitis appeared, patient became delirious, temperature 102, pulse weak and rapid, 120. The attending surgeon, Dr. J. Sheppard, decided to operate at once. The mastoid cells were opened and found to contain a considerable quantity of pus, granulations, and necrosed bone. As these were not considered sufficient to account for the grave cerebral symptoms, it was decided to explore the temporal lobe of the brain for abscess. The skull was trephined about one inch above the auditory canal, and the dura mater was found congested and inflamed. The temporal lobe of the brain was punctured by the trocar in several directions, but no pus could be obtained. In the next forty-eight hours the patient's condition showed much improvement; meningitic symptoms disappeared. There was suppression of urine on second day, and a uremic convulsion. Urine found to be heavily loaded with albumin. Other convulsions followed, and patient died on the third day. It was Dr. Sheppard's opinion that operation should have been done earlier, before the development of the meningitis. The symptoms exhibited by the patient for two months before he came to the hospital would have amply justified an exploration of the mastoid.

For the benefit of practitioners who wish to come here to study eye and ear and throat diseases, I will mention the following institutions which should be visited: The New York Eye and Ear Infirmary, 13th street and 2d avenue; Manhattan Eye and Ear Hospital, 41st street and Park avenue; New York Ophthalmic and Aural Institute (Dr. Knapp), 46th East 12th street; Metropolitan Throat Hospital, 351 West 34th street; Eye and Ear and Throat Departments of the Vanderbilt Clinic, 60th street and Amsterdam avenue; and the New Amsterdam Eye, Ear, and Throat Hospital, 212 West 38th street. There are others, but these are the most important. These departments in the Polyclinic and the Postgraduate should of course be mentioned. Dispensaries and Out-Patient Departments of the larger hospitals, of which there are a great many, always have a large attendance of eye, ear, and throat patients, and one who has access to these places can use them to great advantage. The attending staff at many of these institutions are always willing to accept assistance, and those who express a desire to get some practical clinical work will usually have little difficulty in finding it.

L. B. GRANDY, M.D.

TETANUS AND HYDROPHOBIA.

BROOKLYN, N. Y., October 3, 1896.

In a recent case of tetanus which I saw and which died, the thought occurred to me at the autopsy whether the cerebro-spinal fluid of this case inoculated into a rabbit would cause tetanus as does hydrophobia. The differential diagnosis between tetanus and hydrophobia being, no hallucinations present in the former, while in the latter they are marked symptoms. I would like the opinions of your readers on this subject. Kindly present same in your JOURNAL, and greatly oblige.

With regards, yours very truly,
W. A. HILLEBRECHT, B.S., M.D.

THE TREATMENT OF SWELLED TESTICLE.

In the third volume of Dennis and Billings's new *System of Surgery*, Dr. J. William White and Dr. William H. Furness, 3d, the authors of the section on the "Surgery of the Genito-Urinary System," remark that a patient in whom epididymitis is developing should be put to bed at once, with the scrotum elevated on a pad of cotton. Free movements of the bowels should be kept up and the diet restricted to the very lightest food. If there is any fever, it is well to give a drop of tincture of aconite and five grains of potassium bromide every two or three hours. The affected testicle should be wrapped in lint and kept constantly moistened either with lead-water and laudanum, or with the following lotion:

Tincture of aconite, Tincture of opium, each	1 fl. oz.
Diluted lead water, Water, each	2 fl. oz.

Cold compresses (not iced) are often very soothing, but rest is the chief curative measure during the acute stage.—*New York Med. Jour.*

EDITORIAL.

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DISPOSAL OF THE DEAD.

At present it may be said, generally, that in civilized countries there are three methods of burial, each having a different end in view, or at least having different results as regards the changes of the body after death. These are the closing up of the body in more or less hermetically sealed coffins, composed of very indestructible material, placed in vaults, or deeply in the earth; the enclosing of the body in coffins of light material, so constructed that the effect of burial is to cause the walls to fall in and permit the access of earth to its interior—these also are deposited deeply; and cremation.

Once the mind has become accustomed to the idea, little objection can be taken to the last, beyond the possibility of difficulties owing to the destruction of evidence in connection with the cause of death. But against the first, which seems to be that almost universally in vogue in this locality, several very strong arguments may be urged. It is nasty in the extreme, so much so that the mind refuses, except under compulsion, to consider the condition of the mortal remains of once dear friends which are passing through the unnecessarily long-continued and unnecessarily revolting changes of reconversion to their pristine elements. Such is not "earth to earth" burial; its *raison d'être* is separation of earth from earth. As corollaries of this are the fact that graveyards cover an unnecessary proportion of available land, and that the soil in their vicinity is unnecessarily objectionable for residential purposes.

The second method is that which will in the future, when doctors and others have properly educated the community, probably take its place as the least objectionable of the three. It is the true "earth to earth" burial, for the idea upon which it is founded is the speediest possible contact of earth and body, compatible with the decencies of burial. But even it, as now employed, is not perfect in detail, for while the coffin is made collapsible and perishable, the body is still wrapped in the linen of ordinary wear. A special cloth of short fibre, composed of pith or some other rapidly disintegrating substance, might no doubt be produced for this purpose.

We know now that the bacteria of the soil play a chief part in its chemistry, and that they are most active near the surface. Sir Seymour Haden has found by experiments carried on during the last ten years that, buried at the minimum depth permitted by the English government, 4½ feet, three or four years were required for the complete resolution of uncovered bodies; at the depth of one foot a year and a half was sufficient for the larger, and one year or less for the smaller animals. A body simply laid on the ground, with a covering of earth a foot thick, became, except the bones, completely resolved into oxygen, hydrogen, carbon and other innocuous products necessary for the food of plants in a yet shorter period.

Dr. Poore, of London, contends at the same time that, with proper shallow burial, there is no reason to fear an excessive demand for graveyards, for when properly planted the same land may, with safety, be used again at intervals of about ten years. Thus an acre would suffice forever for a population of 10,000 persons.

SPECIALIZATION IN MEDICINE.

Dr. S. W. Kelly, Cleveland, O., recently read a paper on Pediatrics,—Past, Present, and Prospective, in which he gives the results of certain inquiries which he has made by letter in this country and in Britain concerning the advisability of teaching children's diseases separately from general medicine and surgery, and of practicing "Pediatrics" as a specialty. The answers he received were, as was of course to be expected, divided, and somewhat evenly. Some gentlemen, especially Mr. Owen, London, were thoroughly against specializing this branch of practice, one seeing "no more reason for isolating the teaching of pediatrics from general medicine and general surgery than there would be in separating senile diseases in the same way." Mr. Owen wrote, "A thousand times *No.* I should think it the worst thing in the world for a man to give up his time to the study of *children's diseases.* At Great Ormond Street Hospital, the Mother of Children's Hospitals in England, we will not have a man on the staff unless he is, or is likely to be shortly, on the staff of a general hospital."

It seems to us that there is some difference between teaching and practicing children's diseases. Wards and hospitals are most wisely set aside for children, and the teaching material there should not be neglected; besides, there is no doubt that in a course of lectures and demonstrations confined to diseases in young people certain lights are thrown upon the subject which, though they might be taught along with general medicine, are, as a matter of fact not there so thoroughly taught. We are firm believers in the wisdom of senior students and postgraduates taking special courses in diseases of children, but the advisability of separating them altogether in practice wants decided qualification. We cannot see, however, what objection there is to a physician who has proved himself specially adapted to work among children making them the chief object of his attention so long as he does not cut himself off from the consideration of disease as it affects mankind generally. This is true to a greater or less extent of all specialties, and there is no doubt that the man who starts his career as a specialist in any branch of medicine whatsoever, without having worked for at least some five years among general diseases, handicaps himself as well as his patients.

SUBSCRIPTION BILLS AND AN EXPLANATION.

Upon the back of every bill sent to subscribers in October appeared a polite request for settlement and a statement as to choice of those who were very far behind settling with us or a collection agency. Some few have gotten offended at the latter without just cause. We could not state on the bill how much it took to make one "very much behind." "Very much behind" probably did not apply to over twenty-five men. A bill is never turned over to a collecting agency until its payment seems hopeless, or until the account has run some few years.

Another thing: THE JOURNAL is run with absolute honesty as far as we know it. If a subscriber feels that his account is unjust or he is overcharged, we always give him the benefit of any doubt. On many pages of our books appear such memoranda as these: "Allow claim to," "Cr. by lost copies," and several stating that "So-and-so is unfortunate or broken down in health, *send him no bill.*" When, through error in our bill, a subscriber overpays his account, we send back the amount overpaid. When a man tells us he moved from the address we had long ago, we frequently credit him with lost copies, even if he has failed to notify us of his change of address.

In short, the case is just this: We don't want a cent over our just dues, we always give the subscriber the advantage and we do not expect ever to do less than what is right.

There are excellent gentlemen who have come, or written, and asked an explanation, have been satisfied and have remained our friends.

Others have acted as if they preferred the privilege of resenting a supposed wrong, stopped their JOURNAL and would accept no explanation. To such as these we can only explain and let them depart in peace. MANAGER.

CONTROVERSIES.

We do not believe that medical journal or newspaper controversies do the participants any good, but that they are rather injurious to both sides. We are sorry one has arisen here, but we are pleased to be able to learn some valuable truths from it. Outsiders get a great deal of otherwise unobtainable fact from such disputes, and parties indirectly interested are often shown the opinion which others hold of their position. So while the present dispute will do those immediately interested no good, we expect it to have a salutary effect in other directions. Some excellent writing is being done meanwhile and we are enjoying it greatly. H.

TO THE MEMBERS OF THE STATE MEDICAL ASSOCIATION.

The next meeting of our Association will be held in Macon, a delightful city and a central point. The "good fellows" there are sure to make the meeting pleasant socially, and the officers of the Association hope to have a good lot of papers to make it a successful one. We hope that members will begin to think over the subjects for papers, write the papers, and make all their arrangements with a view to being there.

SELECTIONS AND ABSTRACTS.

SKIN DISEASES AND SYPHILIS.

EDITED BY DR. M. B. HUTCHINS.

THE TREATMENT OF SKIN DISFIGUREMENTS BY ELECTROLYSIS.*

The subject which I have selected is by no means a new one, but it is one about which not much is generally known. The destruction of various abnormal growths by "electricity" has suffered some degree of bad favor through the performances of our enemies "the quacks." That electrolysis has a wide application and a legitimate use I am convinced by my own experience during the past five or six years.

A very good definition of electrolysis is given by "The National Medical Dictionary" as, "The electro-chemical decomposition of a substance."

To do the work outlined in this paper a few galvanic cells, a sponge electrode, a needle-holder, and, for accurate work, a milliamperemeter are necessary; and, to do it properly, some experience.

In most cases the needle should be attached to the negative pole. The current used is weak, usually advised as that from three to seven or eight cells; with a milliamperemeter we find that we get from one-half to five milliamperes, from these, according to the relative position of the electrodes, a greater amount of intervening tissue reducing the current by resistance, a lesser interval increasing it. Again the number of needles used, the manner of touching or grasping the sponge electrode, the wetness of the sponge, all influence the strength of the current.

The strength of current used in the majority of these operations is harmless to the patient, in fact it would not be felt upon an unbroken epidermis. It is intended to get a decomposing, solvent action in most cases, not an action so intense as to have no advantage over caustics and cauteries. There is not even physical warmth in the needle as used.

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*Read before the State Medical Association of Georgia, at Augusta, April, 1896, by M. B. Hutchins, M.D., Clinical Lecturer on Skin Diseases and Syphilis, Atlanta Medical College, Atlanta, Ga.

While many favor a needle-holder without the spring for opening and closing the circuit, I prefer and have long used the one with this attachment, allowing the patient to keep the wet sponge electrode in the hand, or an assistant to hold it in contact with the patient in operations under anæsthesia. An ordinary steel needle, varying in size to meet the requirements, usually suffices, and it is not necessary to use expensive "special" needles. Proper insulation may be used if needed.

When the circuit is first closed there is a feeling of burning and stinging about the needle, but sensation is benumbed in a few seconds. Charlatans claim to use electrolysis painlessly. They can only do so with the aid of anæsthesia, or with an insufficient current.

Local anæsthetics can only be used on a limited area, and their effect is of short duration. Driving cocaine solution into the follicles by "cataphoresis" might be of use. Chloride of ethyl, for freezing and benumbing the part, is useful. Cocaine solution hypodermically does well for small growths.

General anæsthesia cannot be employed in the daily removal of hairs.

In cavernous nævi, "port-wine marks," and other cases which can be finished in an hour or two, or which can be treated at intervals, it is available.

Sometimes, especially where the punctures are very close together, we may get considerable superficial inflammation. A soothing lotion reduces this, however, in a few hours. Scarring cannot occur unless much of the papillary layer, or deeper, is destroyed. I have never produced it where it was undesirable.

A good knowledge of the minute anatomy of the skin and of the disfigurements to be treated is essential to successful work.

Some of the conditions amenable to this treatment are mentioned below.

HYPERTRICHOSIS—For the removal of superfluous hairs, on the face of ladies especially, electrolysis is the only method. Many of the patent hair-removers are excellent stimulants to its growth.

So are pulling out, cutting, and shaving. A lounge, good eyes, a good light, a steady hand, and perseverance are necessary to do the work properly. The patient holds the sponge electrode, positive, the needle is attached to the negative pole. If a steel needle is used attached to the positive pole a black point results, from the deposit of the "black oxide of iron." The needle may be very small for fine hairs, larger for coarse ones.

A current of from one-half to three milliamperes will be sufficient. Remembering resistance, this can easily be managed.

The needle is passed along the side of the hair to the bottom of the follicle, which can be felt, and the circuit closed. Frothing will occur in most follicles, and the circuit can be opened in from five to thirty seconds. The hair then usually comes out with no resistance to the forceps. If it "pulls" reapply the current through the needle in the follicle. Counting the hairs removed is advisable, in view of a later visit from the patient. Those, the papilla of which has not been destroyed will return, and fine hairs, too small for removal, may be stimulated to active growth by the irritation in their vicinity. Other fine hairs grow large in the course of time even, I think, until a woman has no more to develop, regardless of age. An hour is usually long enough to work but I have had to make each operation very much longer in several cases.

It is proper, as Dr. C. W. Allen of New York says, to have a thorough understanding with your patient before you begin, both as to returns and new growth. It is also as well to be frank about the pain; better to have them find it less, rather than more than they anticipated. I have had one case from out of town where it was necessary to remove nearly two thousand five hundred hairs from the chin and mylo-hyoid region in ten days. The patient bore the pain for the result, and there was no scarring. The amount of work still necessary I am not able to report.

Moles—I have never seen a mole which I thought becoming, and I have never seen an injury result from their treatment. I have removed one by excision, which had become epitheliomatous through a razor-cut; there was no recurrence. Moles with the hairs in them will frequently disappear from the simple effect of the current used in destroying the hairs, but destroying the mole does not always destroy the hairs—they are deeper.

The advantages of electrolysis for the destruction of moles and other small disfigurements are, the absence of bleeding, no superstition about "the knife," no wound to dress, and finally, where the current is not too strong, no scarring. The needle is pushed through the base of the mole, if it is a large raised one, to the skin opposite. The current produces a tallowy blanching of the mole with some frothing around the needle and sometimes through a hair follicle in line. A transfixion at right angles to the first is then made, and as many others, radially, as required by the size of the growth.

Flat moles are best treated by perpendicular punctures to their depth. A sheaf of many needles will save time, but the extra resistance demands more current. A form of atrophy goes on for some weeks after treatment, more marked at and along the needle punctures. Any elevated, remaining, or level pigmentary points can be removed at later sittings, by the perpendicular application of the needle. In most cases it will require a close search, after the end of the treatment, to discover the site of the mole.

WARTS of various kinds so tedious of treatment with the old method, save that of excision with or without cauterization, usually dissolve into froth under the action of electrolysis, being more easily destroyed than the average mole.

EPITHELIOMA.—Remembering the histology of epithelioma—one just beginning, or a single recurrent point should yield to this treatment. A case of mine, of the nose, very rebellious, was finally cured by this means.

Small FIBROMATA, *milia, sebaceous cysts*, in fact any small growth, can be destroyed by electrolysis.

KELOIDS and *hypertrophic scars* are benefited by this measure. Keloid is the chief of recurrers, and excision is usually nullified by re-growth from the cicatrix.

COMEDONES which are persistent may be gotten rid of by the electrolytic destruction of the gland whose orifice it plugs, the current, besides its special action, acting like an irritant injection. The same action takes place in retention cysts. Brocq, of Paris, has followed the same procedure in oily, rosaceous conditions of the

UofM

nose. ACNE LESIONS, especially the indurate, afford indications for electrolysis.

ANGIOKERATOMA, a warty condition, with dilated vessels, is most successfully treated by this method.

DILATED CUTANEOUS VESSELS, whether they occur in *rosacea*, *acne rosacea*, about and in scars or as a "*birth-mark*," yield to this treatment without noticeable scarring, if any.

The so-called "PORT WINE MARKS" require much time for their removal, but perseverance will accomplish it.

The old "NÆVUS ARANEUS" is easily destroyed. In these dilatations of the vessels the needle to the negative pole may be inserted either at right angles or longitudinally to the vessels, or if the dilatation is rounded, larger, directly in the center.

ANGIOMA CAVERNOSUM of considerable size requires a more powerful current, the needle to the positive pole for better coagulation, the current being changed to negative at last to free the needle. Their treatment is very tedious.

The method has been used to remove FRECKLES and other pigmentations.

I have mentioned many conditions which can best be treated by electrolysis, and have only to say—in concluding— that the paper read is based almost entirely upon my own practical experience, not upon pure theory, and that my faith in the method is due both to its results in practice and upon myself.

MISCELLANEOUS.

EXTRACTS FROM NOTES ON APENTA AND OTHER WATERS.

BY JULIUS ALTHUS, M.D.,
Consulting Physician to the Hospital for Epilepsy and Paralysis, Regent's Park.

The individual differences which are found to exist in the chemical composition of mineral waters belonging to the same group are of considerable interest from a pharmacological as well as therapeutical point of view. Mineral waters generally contain one or at most two principal ingredients, in addition to which, however, there are habitually two or three other substances present which modify the effects of the prime constituents in a peculiar manner. These "modifiers," as I would call them, oftener occur in very small quantities, and have for this reason by many been considered as inoperative. Such an opinion, however, is erroneous, for careful clinical observation of the action of such waters shows the "modifiers" to be of considerable importance, so that a mineral water would find its individuality impaired or destroyed, were they to be removed. I will remark in passing that this is the principal reason why artificial mineral waters in which the "modifiers" are often left out, in order to save trouble in the manufacture, have not the same therapeutical effects as natural waters.*

Apenta belongs to the class of bitter waters, and contains, as its principal ingredients, the sulphates of magnesium and sodium, while its chief modifiers are the chlorides of sodium and lithium. The medicinal value of bitter waters in general depends to a great extent upon the relative proportion of the two sulphates contained in them.

Pharmacological experiments and clinical experience have shown that those waters act most pleasantly in which the magnesium preponderates over the sodium sulphate, while the chloride of sodium should not amount to more than about $\frac{1}{10}$ or $\frac{1}{20}$ of the two sulphates together. Where the sodium is in excess of the magnesium sulphate, the purgative action of the bitter water is *cæteris paribus* too violent; digestion is apt to be disturbed, and if the use of the water is continued for some time, debility and a degree of anemia will be the result. On the other hand, where the chloride of sodium is in excess, the water does not act so beneficially on the liver.

If we apply the above rules to some of the best known bitter waters we find that:

. . . .

Apenta water shows an excellent proportion of sulphates and chlorides, the magnesium amounting to 24.49, the sodium sulphate to 15.43, and the NaCl to 1.87. It is therefore a most useful aperient. In addition to this it contains an appreciable amount of lithium chloride, by which it is distinguished from all the other waters of this group. Although the quantity of this constituent is small, it is for that reason by no means devoid of effect as a "modifier."

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*I have dwelt fully upon this point in my work on "The Spas of Europe," London 1862.

I may here aptly draw attention to the very small quantity of iron contained in such powerful chalybeates as Spa and Schwalbach (Pouhon 0.375, and Weinbrunnen 0.443 grains in 16 ounces of water). Again, the Kreuznach Elisenquelle, which is so highly effectual in the treatment of scrofula and allied conditions, contains only 0.035 grains of magnesium iodide in 16 ounces, and the Purton water only 0.066 of sodium iodide in the imperial gallon. The presence of lithium in Apenta water explains, therefore, why a course of the latter is so useful in warding off attacks of gout, and in moderating their intensity when present.

It is useful to know that in cases where we are obliged to give morphine in somewhat considerable quantities, either *per os* or hypodermically, as for instance in the gastric crises of tabes, and in severe and obstinate forms of neuralgia, Apenta has an excellent effect in neutralising the prejudicial action of morphine on the hepatic functions. In some of these cases I had previously given small doses of mercury, podophyllin, and other drugs and mineral waters for that purpose, but none of them equalled the beneficial effects of Apenta in this respect.

The same water is useful, as an adjuvant to other treatment, in threatened cerebral hemorrhage in the aged, where there is high tension in the vascular system, with confusion, drowsiness, etc. On the other hand, it sometimes fails to relieve obstinate constipation which arises from deficient nervous influence, as in certain forms of spinal disease, where more stimulating aperients, such as cascara sagrada, etc., find their appropriate sphere of action.—*British Medical Journal*, 26th September, 1896.

HOW TO WRITE A MEDICAL PAPER.

The New York *Polyclinic* (March 15) contains some good suggestions and ideas on this important and always appropriate subject. The writer says that comparatively few who write for publication in medical journals succeed in placing their material before their readers in a form that is to add to the general store of knowledge. One is too often impressed by the array of minutely detailed histories, repetition of well-known facts, and the like, which are entirely unnecessary to the proper elucidation of the subject, and the perusal of which merely takes up the reader's time without a commensurate benefit accruing therefrom. In reporting an experience with a certain therapeutic measure, it is entirely unnecessary, in a majority of instances, to publish a long dissertation upon the history of the particular method under discussion.

A useful preface to a treatise, or report of a case, is one that states in a few words the author's purpose in presenting it. Medical men, in their hurried reading, do not care for a long-drawn-out preface, nor do they attach as much importance to a minutely-detailed history of a case as they once did; they prefer only the salient points which bear directly upon the purpose of the article.

Medical men are busy men, and therein often lies the reason, although not a good one, for the careless preparation of an article which might be excellent were it not for the unfortunate characteristic mentioned. The value of their literary contributions may often be greatly enhanced by a careful and painstaking editor, who arranges them, cuts out irrelevant matter, and in general brings them from literary chaos to a condition which, in a measure, fits them to meet the expectations of the author and satisfy the requirements of the reader. Although many of our professional brethren have not had the advantages of a higher literary education, still, few of them are really ignorant, and there is no legitimate reason why all, when necessity or inclination prompts, should not wield that mightiest of weapons, the pen, to the best advantage.

1. In your writing be, above all things, *purposeful;* afterward, concise, relevant, definite.

2. The subject selected should contain but one definite line of thought; should not be trite; should be one in which you are personally interested; if argumentative, one in which you have convictions. It should be suited to your abilities and to your opportunities for forming a correct judgment of the merits of the subject

treated; should be stated intelligently; should be no broader than the essay itself.

3. Make an outline of your subject; it will enable you to read up accurately and profitably; it will afford mental discipline.

4. Be careful to pay attention to the elegance of your language; to such little things as correct paragraphing and punctuation.

RELATIONS OF MEDICAL EXAMINING BOARDS TO THE STATE, TO THE SCHOOLS, AND TO EACH OTHER.

Dr. William Warren Potter, of Buffalo, president of the National Confederation of State Medical Examining and Licensing Boards, chose this title as the subject of his annual address at the sixth conference of this body, held at Atlanta, May 4, 1896.

He said there were three conditions in medical educational reform on which all progressive physicians could agree—namely, first, there must be a better standard of preliminaries for entrance to the study of medicine; second, that four years is little enough time for medical collegiate training; and, third, that separate examination by a State board of examiners, none of whom is a teacher in a medical college, is a prerequisite for license to practice medicine. It is understood that such examination can be accorded only to a candidate presenting a diploma from a legally registered school.

He further stated that a high school course ought to represent a minimum of academic acquirements, and that an entrance examination should be provided by the State for those not presenting a high school diploma or its equivalent.

He did not favor a national examining board as has been proposed, but instead thought all the States should be encouraged to establish a common minimum level of requirements, below which a physician should not be permitted to practice; then a State license would possess equal value in all the States.

In regard to reciprocity of licensure, Dr. Potter thought it pertinent for those States having equal standards in all repects to agree to this exchange of interstate courtesy by official indorsement of licenses, but that other questions were of greater moment just now than reciprocity. Until all standards were equalized and the lowest carried up to the level of the highest, reciprocity would be manifestly unfair.

He urged that the States employ in their medical public offices none but licensed physicians. This, he affirmed, would tend to stimulate a pride in the State license, and strengthen the hands of the boards.

He denied that there was antagonism between the schools and the boards, as had been asserted. He said that both were working on parallel lines to accomplish the same purpose, that there could not possibly be any conflict between them, and that they were not enemies but friends.

The medical journals of standing from one end of the country to the other, he affirmed, were rendering great aid to the cause of reform in medical education, and the times were propitious.

He concluded by urging united effort by the friends of medical education, saying that "the reproach cast upon us through a refusal to recognize our diplomas in Europe cannot be overcome until we rise in our might and wage a relentless war against ignorance, that shall not cease until an American State license is recognized as a passport to good professional standing in every civilized country in the world."

MEDICAL EXPERT TESTIMONY.

A committee of the Medical Society of the State of New York, appointed to report upon the most feasible plan by which present methods of introducing medical expert testimony can be improved, submitted the following:

WHEREAS, The present method of obtaining medical expert testimony tends to lessen the value of such testimony and to bring the medical profession into disrepute; therefore, be it

Resolved, That the medical society of the State of New York would recommend the enactment of a law by the legislature providing for the appointment of experts by the courts, and that only physicians of repute in the particular branch of medical science to which the question calling for expert opinion relates, shall be appointed; that the function of the experts so appointed shall be advisory, and the number thus appointed shall be such as to adequately represent the court, and both sides of the question at issue, as in the judgment of the court shall seem necessary; that the experts so appointed shall have full and free access to all the evidence in the case, as well as access to the plaintiff or defendant in person as the case may be, if the issue involves his mental or physical state. That the expert shall submit to the court for transmission to the jury a report in writing, setting forth their conclusion and the facts in evidence on which such conclusion is based; that the cross-examination of such experts shall be limited to the facts and opinions embraced in their testimony as embodied in their report, and that their compensation shall be fixed by the court at a rate that is reasonable for professional services of such a nature.

GENERAL MEDICINE AND THERAPEUTICS.

How Shall We Feed the Baby.

Dr. John T. Winter, in the *Journal of Obstetrics*, touches some disputed points in infant feeding under the above title.

"The question as to whether milk should be given fresh or boiled is one that should receive some attention. There is no question but that the heat of sterilization robs the nuclein of the milk of its vital properties to some extent, but where we are dependent on the dealer who receives his supply of milk from the country and has it in his dairy a number of hours before it is delivered to his customers, it should be either sterilized, pasteurized, or boiled; but where it can be had fresh and free from bacteria, it can be used in the raw state and can be warmed sufficiently by the water with which it is diluted, and it is thought in this way to be more nourishing and more easily digested.

"I do not think it wise to habitually peptonize milk for healthy children, as their digestive organs, not being called on for full duty, are, I fear, weakened; and the careless manner in which the sterilizing of milk is frequently done makes it many times rather harmful than beneficial, as it makes the coagula of casein in cow's milk much harder to digest.

"My objection to the use of condensed milk is that while the infant will fatten on its use, it is usually found to be pale and flabby, and does not, many times, have strength enough to carry it through childhood. By the addition of cream and the water from barley or rice, or a thin oatmeal gruel, we can improve it in this particular.

"During the first week or two after birth the child should be fed every two or three hours, and will require about one ounce at each feeding, about half a pint a day—good milk, two drachms; boiled water, rice water, or barley water, six drachms.

"By the second week, and up to about the sixth week, it will require about one pint a day, and, unless the milk is first-class, it will be well to add sugar-of-milk and cream—sugar-of-milk, four grains; cream, one drachm; milk, four drachms; water, one and a half ounces.

"At from about the third to the sixth month it will take nearly four ounces at each meal, nearly a quart a day—sugar of milk, one scruple; cream, two drachms; milk, one ounce; water, two ounces.

"From this time on about the same proportions should be maintained, the quantity being gradually increased until three pints—perhaps a little more—are taken in twenty-four hours, the quantity of water being gradually reduced, or a thin oatmeal gruel can be substituted for the rice or barley water. A small pinch of salt can occasionally be added. This gruel can be gradually thickened, so that by the time the child is ten or twelve months old it can have, say, two meals a day of oatmeal gruel and three of pure cow's milk.

"It is better for the child up to this time to keep it from the table and not to allow friends or strangers to give it candy, cakes, or other food, but from this time on potatoes and other suitable articles of diet can be added."—*American Medical Review.*

CONSUMPTION AMONG THE COLORED POPULATION OF THE SOUTHERN STATES.

Hubbard (Tennessee Medical Society, April 14) says: As far as I have been able to ascertain, from the testimony of many physicians who practiced in the South before the late civil war, pulmonary consumption was a comparatively rare disease among the slave population, some even affirming that it was entirely unknown.

According to the United States census of 1890 the total number of deaths from consumption in the United States, for the year ending May 31, 1890, was 102,199; of these 84,173 were white, and

18,026 were colored; the per cent. of deaths from this disease being 11.1 among the white population and 15.4 among the colored. In the State of Alabama for the same year the proportion 8.1 white, 12.7 colored, or about fifty per cent. greater.

Recent statistics from Atlanta, Ga., Baltimore, Md., Charleston, S. C., Memphis, Tenn., Nashville, Tenn., Richmond, Va., Macon, Ga., St. Louis, Mo., show that the average proportion of deaths from consumption to that of total mortality is, 10.4 of the white population, to 16 of the colored; or nearly three times as great.

It is generally believed that those of pure African descent are less susceptible to this disease than those of mixed blood.

Among the most important causes of this excessive mortality are the following:

1. Ignorance concerning the laws of hygiene.
2. Unhealthy dwellings, often situated on damp and narrow alleys, reeking with filth.
3. Improper food, lacking in quantity and of poor quality.
4. Insufficient clothing and exposure in inclement weather.
5. Irregular habits and lack of proper amount of sleep.
6. Excessive use of intoxicating drink and other vices.
7. Lack of medical attention and proper nursing.

As remedies I would suggest:

1. Thorough instruction in practical hygiene in all colored schools and higher institutions of learning.
2. Prohibition by law of the use of dwellings, school buildings, and churches unfit for habitation; and frequent examinations by competent sanitary inspectors.
3. The sale of adulterated and unhealthy food should not be allowed, especially milk from cows affected with tuberculosis.
4. The use of intoxicating liquors, except as medicine, should be prohibited.
5. Those who are unable to procure proper medical attention should be provided with physicians at the public expense, and hospitals for consumptive patients should be prepared for the reception of those who are affected with this disease.
6. All cases of consumption should be promptly reported to the proper health officer, who should give the necessary instruction as

to the best sanitary measures to be pursued; and after the death of the patient the premises ought to be properly disinfected as is done in the case of other contagious diseases.—*Charlotte Med. Jour.*

SNAKE-VENOM ANTITOXIN.

Mr. E. H. Hankin states that the poison secreted by the microbes of tetanus and diphtheria are closely allied to, if not indistinguishable, chemically, from the poison secreted by venomous snakes. Mitchell and Wolfenden have discovered that the venom of snakes owes its properties to the presence of a poisonous albumin, that of the cobra, according to the author, being so active that for the mouse the lethal dose of the dried poison has been found to be no more than the thirteen-millionth part of its body-weight. Sewell showed in 1887 that it was possible to make pigeons immune against rattlesnake-venom by injecting into them a series of minute doses of this substance. The question of the possibility of producing antitoxins which might neutralize the poison of venomous snakes has been taken up by Calmette and Fraser. Both have succeeded in producing a high degree of immunity against snake-poison in animals, and both have found that serum of such animals possesses the power of neutralizing cobra venom. The former claims that the activity of his antivenine is ten thousand units. There is little doubt that antivenine would produce immunity in a safe and easy way if injected an hour previous to the bite, and in a small dose. While it is easy to produce an immediate though temporary immunity, it is comparatively difficult to effect a cure when once the symptoms have arisen. Hence the one hope of success is to inject the remedy at a sufficiently early date after the bite. The limb should be well ligatured, in hope that the remedy may be absorbed into the system in advance of the poison. Since death within half an hour after the bite of a venomous snake is the exception, and since, as a rule, more than three hours elapse before the fatal issue, and, further, that antivenine, even when used an hour and a half after the bite of extremely venomous snakes, has been found to be efficacious, there is good reason for expecting favorable results from this treatment, which has been found to be active against the poison of all species of snakes in which it has hitherto been tried. The injection is made, under antiseptic precautions, into the subcutaneous cellular tissue of the flank. Then with the same syringe injections of aqueous solutions of lime chloride (1 to 60) are made about the bite, which has been previously washed with the same solution. Neither alcohol nor ammonia should be administered, since these may interfere with the action of the remedy.—*Indian Medical Gazette*, 1896, No. 2, p. 56-*Quoted in Am. Jour. Med. Science*, May, 1896.

TREATMENT OF TETANUS.

Trevelyan (*British Medical Journal*, February 8, 1896) reports a case of cephalic tetanus treated by injections of antitoxic serum. The serum was obtained from Roux, of Paris. Half of the serum in the tube was injected on the second day and the other half on the third day, but no trace of improvement could be detected even by the most interested witnesses. The author states that it is the third case in which he has assisted in the serum treatment, and in no case did it exercise the slightest influence on the course of the disease. There were in all seven cases.

Willard and Johnson (*Transactions of the Philadelphia College of Physicians*, vol. xvii, p. 27) reported a case of recovery from cephalic tetanus following a slight injury in the neighborhood of the eye. The treatment consisted in loosening the scar and administering sedatives. The patient was a boy twelve years of age, and the doses were increased until he took, in each twenty-four hours, seventy-five grains of bromide of potassium, thirty grains of chloral, and thirty-six drops of the deodorized tincture of opium.

DR. DELBECQ, in the *Nord Médical*, reports a case of a boy thirteen whom he cured of tetanus, following in some twelve hours after a wound of the knee, produced when bathing by a broken vase. Bromide and chloral, and later chloral and morphia, were given and stopped on the second day. It required three 10.c.c. doses of the "anti-tetanique" to turn the balance in favor of recovery.

SOME THERAPEUTIC USES OF GUAIACOL.*

I desire to give my experience, gleaned from bedside observation, of that little-written-about drug, guaiacol.

Its use as a local application for the reduction of temperature was first suggested to me by Dr. J. Solis-Cohen, some two years ago, in a case of tuberculosis which he saw in consultation with me. Its action in this case was so prompt and effective that I pushed the investigation in other diseases, with results herewith summarized.

In September, 1894, when I entered upon my term of service in the Williamsport Hospital, I commenced the use of guaiacol as a local application for the reduction of temperature. In typhoid fever, since then, I have had it applied 864 times—778 times in the hospital, and 86 times in private practice. These applications were made to forty-three different persons, about equally divided between males and females, with wide variation of ages. The greatest number of times it was applied to any single person was 78, and the least number of times, once. The largest dose was twenty-five drops and the smallest two drops. The greatest reduction of temperature was from 106.8° to 101°, in two hours, by the application of five drops, with a corresponding reduction of the pulse-rate from 136 to 110 per minute, the respirations falling from 36 per minute to 28. This patient, however, showed very great susceptibility to the drug, as the application of two drops reduced the temperature from 103° to 100.4° in one and one-half hours. A number of special reports were prepared for me by the nurses, of some of the cases in which guaiacol was applied, which may be useful in showing its effect not only upon the temperature but also upon the pulse:

Carrie Horton:

Five drops of guaiacol applied.	Pulse.	Temp.
9:45 P.M.	144	107°
10:20 P.M.	132	104.2°
10:50 P.M.	132	102.2°

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* Read before the Philadelphia County Medical Society, April 22, 1896, by Horace G. McCormick, M.D., Williamsport, Pa., Physician to the Williamsport Hospital, Pennsylvania.

Five drops applied.	Pulse.	Temp.
12:45 P.M.	130	104°
1:30 P.M.	120	100.6°

Five drops applied.	Pulse.	Temp.
5 A.M.	118	104°
5:30 A.M.	108	102.4°

Five drops applied.	Pulse.	Temp.
1:25 P.M	135	104°
2:20 P.M.	130	101.8°

Ada Saxton:

Twenty drops applied.	Pulse.	Temp.
11 A.M.	126	104°
12:30 P.M.	112	101°
3 P.M.	110	100°
4 P.M.	122	99°

Annie Witzman:

Ten drops applied.	Pulse.	Temp.
10 P.M.	130	104.4°
11 P.M.	108	100.6°
12 midnight	105	98.2°
12:30 A.M., slight chill.		

Fifteen drops applied.	Pulse.	Temp.
12 M.	126	105.2°
1 P M.	120	101.4°
2 P.M.	106	100.8°

Fifteen drops applied.	Pulse.	Temp.
10:40 P.M.	156	107°
11:15 P.M.	134	104°
12 midnight	116	102.4°
12:45 A.M.	108	99.8°

It will be noticed that within thirty minutes after the application there was a fall in the temperature, and in most cases a corresponding reduction of the number of heart-pulsations per minute. It is generally asserted that guaiacol is a depressant, and for this reason, a dangerous remedy in diseases in which the circulation is likely to suffer from long-continued fever. This assertion has not been borne out by my experience. On the contrary, I have seen at different times, with a high temperature, a pulse so rapid and weak that it could not be accurately counted, after the application of guaiacol distinctly lessened in frequency and strengthened in force. A weak and rapid pulse is to me no contraindication for the use of the drug.

In the case of Annie Witzman the reduction of temperature is well illustrated; seventy-eight applications were made. It will be noticed that on November 11th, at 10:40 P.M., the temperature reached 107° and the pulse was 156. Fifteen drops of guaiacol were then applied, and at 12:45 P.M. the temperature was reduced to 99.8° and the pulse was 108. The table does not show this. The ice-pack was used in this case, being kept up for twelve consecutive hours; yet I was forced to abandon this and return to the guaiacol in order to reduce the temperature. This case was one of the most persistent cases of high temperature I have ever seen. The patient made a good recovery.

The effect of guaiacol lasts from three to four hours; the more often it is applied the greater the effect. When I first commenced the use of this drug I found that the sudden reduction of temperature caused chilling in a number of cases, but after I became more accustomed to its use chills rarely occurred. If it can be avoided, the temperature should not be reduced below 100°; and this is a matter which can easily be regulated after the applications have been made a few times, care being taken to commence with a small dose—say from ten to fifteen drops—this gradually being increased if necessary until the temperature is reduced.

It has been suggested that by this rapid reduction of temperature there is great danger of producing congestion of some of the internal organs of the body. I have not seen a single unfavorable symptom (except an occasional chill) following its use. I had one case of pneumonia as a complication, but this did not develop until six days after the last application of guaiacol, which was in no way responsible for it.

The point selected for the application was the right iliac region. This was thoroughly cleansed with soap and water, and after the part was thoroughly dried (it is important that the surface should be entirely free from moisture, for guaiacol being of an oily nature will not be absorbed if there is the least moisture present) the guaiacol was slowly dropped upon the surface and thoroughly rubbed in with the hand for from ten to fifteen minutes. The part was then covered with oiled silk or waxed paper. The only preparation used was Merck's, and it rarely failed to produce the desired result. Any other point would probably do as well for the application, but I selected this because it was as near the seat of the trouble as I could possibly get, and could be easily reached and covered with the oiled silk, without in any way disturbing the patient. In only three cases was any local irritation produced, and I was forced to move to the left side to make my applications.

There were no unpleasant symptoms accompanying its use, and no complaint was made by any of the patients. The disagreeable odor that has been described by some as being objectionable, was referred to by only one of my patients, and then only on the first application. Sweating is nearly always produced, corresponding somewhat to the greater or less reduction of temperature.

One very important fact was observed in the use of this drug for the reduction of temperature in a case of pyemia. The case was seen in consultation with Dr. Detwiler, and was found with a temperature of 107°. Twenty drops of guaiacol produced no effect. The application was repeated in forty minutes, and yet no effect on the temperature was produced. Fifty minutes later another application (this time forty drops) was made with the same result as before. The applications were continued until the expiration of three hours, when 100 drops had been applied; yet during this time the temperature had not varied over half a degree from 107°. The pulse was weak and rapid when the first application was made, at the end of three hours had lessened in the number of beats per minute and increased in volume. There was no sweating in this case. I have not had an opportunity of trying guaiacol in any other case of pyemia, but from my experience in this one I am led to believe that it has no value.

It may be urged that the fever of typhoid is not the disease, and does not call for treatment. That it is the disease no one will pretend to assert; but that it is an important symptom, and when it rises beyond a certain point calls for something to reduce it, or keep it in abeyance, every physician who has had much to do with this disease can bear testimony.

When the system of baths was first introduced, the only object was the reduction of temperature, but those using them found that their patients did so well under this form of treatment that they took to philosophizing upon the subject, and undertook to prove that the cold bath did something else not exactly admitting of explanation, by modifying the disease, lessening the fever, and making the case a less formidable one. That this effect is produced I am willing to concede, but that the baths do more I believe is open to serious question, and further proof will be required to place it beyond controversy in the profession.

Much has been written by the advocates of the system of the delight and pleasure their patients have experienced in being put in a cold bath. I believe these gentlemen have never tried it themselves. I have no reason to believe that the people of Philadelphia or Baltimore are any less susceptible to cold than those in the interior of Pennsylvania. I have used the cold bath many times, and, with the exception of a colored boy whom I treated in this way some time ago, I have not been able to make my patients believe by any argument of mine that it was an enjoyable pastime. I thoroughly believe in it as an effective form of treatment, but it is not pleasant for the patient; it is difficult to carry out in detail; it involves great expense, and, in private practice, is not a practical form of treatment. In spite of the invention of portable bathtubs, the method still lacks that practicability that is demanded by the general practitioner.

Guaiacol, when given internally, does not markedly reduce the temperature. I have given as high as ten drops in a single dose to a patient without materially affecting the pyrexia, while the same amount thoroughly applied to the skin would reduce the temperature to a marked degree. I have also applied the remedy to those in health in sufficient doses to reduce an abnormal temperature, without any effect upon either the temperature or the pulse.

The natural question to ask would be: If this drug possesses the power as here asserted, what is its method of action? How does it reduce temperature? What is the physiologic action? Now, in order that there may be no controversy, with me at least, upon this subject, I candidly assure you that I do not know. I know the effect, but cannot explain how it is brought about.

While I have a high regard for guaiacol as a local antithermic, none of this respect is lost when I come to use it internally. As an intestinal antiseptic, I believe it has no superior. I have used it in fifty-six cases of typhoid fever, with the best results. The best evidence of its virtue in these cases is the fact that tympanites was either entirely abolished or was present in so slight a degree as to be of no consequence. The tongue was moist throughout the disease, and delirium, if present, was of a very mild form. Of the fifty-six cases thus treated, fifty-five recovered. In the one in which death took place, the patient was admitted to the hospital on the fourteenth day of his sickness, and died on the nineteenth—of perforation; an autopsy was made, and it was found that the perforation had taken place about three inches above the ileo-cecal valve. When the abdomen was opened, the unmistakable odor of guaiacol was found to be present. This was to me an important discovery, as by the death of this man was proved—what I had before been led to believe—that guaiacol passes through the alimentary canal unchanged, for the guaiacol which had been given this man was still guaiacol at the ileo-cecal valve, and passage through the colon would not be likely to change it. The smell of guaiacol was noticed in the stools of nearly all of these patients. It has been my practice to give pure guaiacol in emulsion. This is rather a disagreeable dose, and some objected so seriously to its use that I was forced to give it in capsules; when this was not expedient, then I gave guaiacol of carbonate dry upon the tongue in two and a half grain doses. I have never found this to disagree with the stomach, and patients do not offer any objection to taking it.

In summing up this question, I feel convinced of the following facts:

That guaiacol, when applied locally in typhoid fever, is certain to reduce the temperature.

That, with the care that a physician should always use in the administration of drugs, it is absolutely safe.

That chills will not occur if the temperature is not reduced below 100°.

That no deleterious effects are produced upon any organs of the body by its use.

That it is easy to apply, and can be used by any one competent to nurse a typhoid-fever patient.

That there are no depressing effects following the use of the drug, if used intelligently.

That by its continued use the dose can be gradually lessened.

That it is far superior to the cold bath, in that it can be used by one person. No appliances are necessary for its use that are not obtainable in any house. It is much more pleasant to the patient, and carries with it no horror to the family. Argument and persuasion with the family and friends are not made necessary. It is fully as effective as the cold bath. Patients are not subjected to the danger of moving. There is no complication, such as hemorrhage, etc., that is a contraindication to its use.

That when given internally it is one of the best intestinal antiseptics known, if not the best. By its use in typhoid fever, the dry tongue and tympanites are abolished, digestion and assimilation rendered more perfect, and the probabilities of hemorrhage reduced to almost *nil*.—*Medical and Surgical Reporter.*

MEDICAL ITEMS.

Sir George Humphry, Professor of Surgery at the University of Cambridge, and Sir J. Eric Erichsen, ex-President of the Royal College of Surgeons of England, etc.,whose writings on surgical subject are so well known, have both died recently.

Personal.—Dr. Wm. Curtiss Bailey, who was in Atlanta last winter and lectured at the Atlanta Medical College, is now Medical Director of the Las Vegas Hot Springs Sanitarium, New Mexico. The Institution will be conducted especially for those who are afflicted with tuberculosis, chiefly in the earlier stages. The situation and management of the Sanitarium are excellent for the purpose.

The annual meeting of the Clinical Society of Maryland was held in the Hall of the Medical and Chirurgical Faculty, 847 North Eutaw Street. The President, Dr. J. M. Hundley, was in the chair.

Reports of the officers were received and the president expressed his thanks to them, especially to the Executive Committee, for their assistance in making the past such a successful year.

The election resulted in naming the following gentlemen to serve for the ensuing year, viz.:

President, Dr. S. K. Merrick; Vice-President, Dr. W. D. Booker; Recording Secretary, Dr. H. O. Reik; Corresponding Secretary, Dr. W. G. Townsend; Treasurer, Dr. W. J. Todd; Member Finance Committee, Dr. J. M. Hundley; Executive Committee, Dr. J. W. Lord, Chairman, Dr. W. B. Canfield, Dr. T. P. McCormick.

WHO IS THIS? We learn from a northern exchange that the following attractive advertisement is carried on the stationery of a "Georgia graduate":

After 5 days return to : : :
DR. —— ——
Graduate from Medical College, Atlanta, Georgia.
SPECIALTIES:—Obstetrics and results; Disease of Females, Chronic or Acute. Cancers, Hemorrhoids (piles). Cure guaranteed if instructions are carried out. Very little pain attached to remedy, without legation or knife. Tumors and Wens cured without the use of knife. Good references given if called upon. I also have a genuine Madstone, has been successful preventing hydrophobia after being bitten by Rabid dogs, etc.
Charges reasonable. The doctor will visit his patients at their private rooms when called upon, and can be found by inquiry at his office at

. . . .

I also have some very desirable property in the town of ——— for sale.

THE ninth annual meeting of the Southern Surgical and Gynecological Association, will be held in Nashville, Tenn., Tuesday, Wedneday, and Thursday, November 10th, 11th, and 12th, 1896. The Nicholson House has been selected as headquarters for the Association. The rates will range from $2.00 to $4.00 per day. Arrangements have been made with the Southern Passenger Association for reduced rates on the certificate plan. These certificates, properly signed, will entitle those who attend to a return ticket at the rate of one-third of one full fare. Those who contemplate attending the Pan-American Medical Congress, to be held in the City of Mexico, November 16-19, will have time to do so after the meeting of the Southern Surgical and Gynecological Association. A rate of one fare for the round trip has been made on account of the Congress, stop-over privileges being allowed holders of tickets therefor. Dr. W. E. B. Davis, Birmingham, Ala., is secretary.

THE following appears in the *Southwestern Medical and Surgical Reporter:*

THE MEDICAL MAID.

The Professor (loquitur).

As I gaed to meet my class,
  A winsome quean came after me;
Quo' she, "Sir, wad ye gi'e a lass
  Prelections on Anatomy?"
I spiered was there nae work at hame
  Micht suit her mair becomingly,
For delvin' in a corpse's wame
  Was neither sweet nor womanly.

But deil may care, she said her share
  Was not domestic drudgery;
An' threapit that her mission here
  Was medicine and surgery;
Nae longer she'd her cawnle hide
  Aneath a bushel, scomfishin',
Since woman noo wi' rapid stride
  Her function was accomplishin'.

Afore her powers o' speech I fell,
  She fairly got command o' me,
I felt I wasna just mysel'
  An' she'd the upper hand o' me.
Wi' smiles sae sweet, an' words sae fair,
  She made I watna what o' me;
Says I: "My woman, fleech nae mair:
  I'll drill ye in Anatomy,"

I thocht I did but what was richt,
  Tae treat her wi' urbanity;
My state, hooever, since that nicht,
  Has bordered on insanity.
I'm clean dumfoundered what to say,
  What pairts tae gi'e, whaur she's tae be;
For decency, I think I'll hae
  Her demonstrations privately.

My best cadaver she at aince
  Bespoke in its integrity;
It was a male; I cudna but
  Admire her intrepidity;
When I suggested something mair
  Consistent wi' propriety,
An aince she said she wadna be
  Restrickit in variety.

Frae day till day I've thocht the jade
  Wad drive the senses oot o' me,
Wi' spierin' whiles aboot sic things
  As did pit me aboot a wee;
An' aye she'd houp I'd not forget,
  Wi' want of generosity,
'T was science set her there, and not
  A morbid curiosity.

My words oot o' respect for her
  I've trimmed wi' ingenuity;
An aince she said my language was
  Devoid o' perspicuity.
She disna gi'e a single flea
  For feminine timidity,
Demandin' baith to hear and see
  The plain facts wi' lucidity.

It's no mysel' alane she skeers
  Frae speakin' wi' security:
Ilk bashfu' lecturer she hears,
  Takes refuge in obscurity;
Oor houdies a' she pits till shame,
  For wi' superiority,
It speaks aboot the female frame
  On sic direct authority.

Ilk jurisprudence lecturer
  Complains o' his predicament;
He canna thole tae speak tae her
  On horrors that suld mak' her faint.
It's kittle no tae feel confused,
  Or tell her wi' facility
O' things that micht mak' her amazed,
  If that's a possibility.

The surgical professors say.
  It wad be sae incongruous
O' certain ills tae speak, that they
  Maun modify their syllabus,
A class o' matrons they micht face,
  O' strict respectability,
But frisky kimmers in their place
  Tells on their equanimity.

The folk outside bid us gi'e in,
  Sin we're in the minority;
They haud oor case no worth a prin
  An' hers tae hae priority.
I was a gowk tae tak' her in,
  For now she'll no gang oot again;
Man's first mishap cam' by a lass—
  My days hae been cut short by ane.

BOOK REVIEWS.

Borderland Studies. Miscellaneous Addresses and Essays pertaining to Medicine and the Medical Profession, and their Relations to General Science and Thought. By George M. Gould, A.M., M.D.; formerly Editor of the *Medical News.* Blakiston, Philadelphia. For sale by J. F. Meegan, 23 Marietta street, Atlanta, Ga. Price, $2.

This is a book which contains some matter which is interesting especially to medical men, but none which is not suitable reading for the laity as well, while the major part of it deals with questions of supreme moment to every thoughtful mind. Such chapters as those on "Life and its Basis," "Immortality," "Character," "Maternal Love," etc., are very well worth careful reading. The theology of greatest interest for those whose lives are spent in touch with science, and especially in constant consideration of questions dealing with life and death, is that which discusses fundamental questions, the reasonableness of God, and of a future life, the individuality or otherwise of such life, the relationship of mind to brain, responsibility, and others of a like nature, more than questions concerning the trinity, the confessional, church government, which to our thinking take up more than their due share of attention, while the momentous questions are left too often to take care of themselves. It is with the former class that Dr. Gould's book in great part deals, and it does so in a manner which is decidedly attractive and in some parts original. We hardly think his argument conclusive concerning the necessary sinking of the individual life in a future state of existence into a common life, or that the two are not compatible in the future as they appear to be at the present. But entire agreement is not to be expected in the present state of knowledge. In spite of probable differences of opinion between the author and his readers, the book is highly to be commended as both instructive and pleasant reading.

DAVIS'S OBSTETRICS. A Treatise on Obstetrics. For Students and Practitioners. By Edward F. Davis, A.M., M.D., Professor of Obstetrics and Diseases of Infancy in the Philadelphia Polyclinic, Clinical Professor of Obstetrics in the Jefferson Medical College of Philadelphia. In one very handsome octavo volume of about 600 pages, with 217 engravings, and 30 full-page plates in colors and monochrome. Cloth, $5.00; leather, $6.00. Lea Brothers & Co., Publishers, Philadelphia and New York, 1896.

This book is divided into seven sections:—Pregnancy and Labor, Pathology of Labor, Obstetrical Operations, Abortion, Extra-uterine Pregnancy and the Puerperal State, Infancy in Health and Disease, Diseases of Infancy, and the Jurisprudence of Obstetrics. The author proves himself a man of high culture not only in the science of obstetrics, but also in the field of general biology. His work is concisely written, and contains an immense amount of information. The illustrations are a very conspicuous feature of the work. Besides being very numerous they are, on the whole, good, but we think it is possible to carry this element of the modern medical book a little too far. For instance, engravings of an ordinary binaural stethescope and of a tape measure, and photographs of such subjects as the obstetrician with his hand under a sheet, making a vaginal examination, the patient being practically invisible, can scarcely add to the usefulness of the work. Some of the photographs appear to be of small value, and are not over distinct. Wealth of illustration can, however, only be a fault on the right side. That errors in the text are not wholly wanting is evidenced by the fact that on page 61 Wolff's work on Epigenesis is referred to as having been undertaken in 1859 instead of 1759. These are comparatively small matters, and the book is one well worth study, and destined no doubt to be popular.

A TREATISE ON APPENDICITIS. By John B. Deaver, M.D., Surgeon to the German Hospital, Philadelphia. Containing 32 full-page plates and other illustrations. Published by Blakiston, Son & Co., Philadelphia, and on sale by J. F. Meegan, 23 Marietta street, Atlanta.

This is a beautifully printed and illustrated volume of 168 pages, in which the author gives the result of his experience with this now so famous disease. The chief point of discussion at the present time in connection with it is that of treatment, which is summed up in this book as removal of the appendix as soon as the inflammatory condition there is diagnosed, failing which one must rely mainly on properly administered purgatives, special stress being laid on the avoidance of opium. However true it may be that operation in experienced hands is in many cases the best procedure, it seems to us necessary that a word of warning should be given against promiscuous operation by those unaccustomed to such serious work, and we venture to think that in country practice the mortality will be greater by operative methods than where simple medical treatment is employed, even while we grant that some cases are practically certain to end in death without operation. The point is that this is work for the trained surgeon and not for the average general practitioner.

THE STUDENT'S MEDICAL DICTIONARY, including all the words and phrases generally used in medicine, with their proper pronunciation and definitions, based on recent medical literature. By George M. Gould, A.M., M.D. With elaborate tables of the bacilli, micrococci leucomains, ptomains, etc., of the arteries, ganglia, muscles, and nerves; of weights and measures; analyses of the waters of the mineral springs of the United States, etc. Tenth edition. Rewritten and enlarged. Published by Blakiston, Son & Co., Philadelphia, and for sale, $3.25, by J. F. Meegan, 23 Marietta street, Atlanta.

The author states in his preface that, despite their popularity, the older editions were unsatisfactory to him, and that the present volume is an entirely new one, and designed to take the place of the New Medical Dictionary and the Student's Medical Dictionary, the plates of which have been destroyed. To his larger work, the Illustrated Medical Dictionary, one is referred for more complete information.

The Student's Dictionary contains a sufficient outline of terms relating to medicine, and is so arranged and printed that reference is easy and satisfactory. We have noticed only one misprint, an accoucheuse being defined as a wife.

The book is highly to be commended and author and publisher to be congratulated on the appearance of the work.

A COMPEND OF GYNECOLOGY. By William H. Wells, M.D., Adjunct Professor of Obstetrics and Diseases of Infancy, in the Philadelphia Polyclinic; late Assistant Demonstrator of Clinical Obstetrics in the Jefferson Medical College, Philadelphia, etc. Blakiston, Philadelphia. On sale by J. F. Meegan, 23 Marietta street, Atlanta. Price 80 cents.

This is one of a class of books which are of doubtful value in preparing the student for a true knowledge of medical subjects, their only use being as an aid in cramming before an examination. But of its kind it is apparently one of the best, mainly on account of its numerous illustrations, which do more than any short description can to convey an understanding of the subjects under discussion. The matter is divided under headings in such a way as to recall information previously obtained, but is too condensed for first study. It is a good book of its kind.

A COMPEND OF DISEASES OF CHILDREN. Specially adapted for the use of Medical Students. By Marcus H. Hatfield, A.M., M.D., Professor of Diseases of Children, N. W. W. Medical School; Physician to Wesley Hospital, Home for Crippled Children, Chicago Orphan Asylum, etc. Second edition. Thoroughly revised, with a colored plate. Published by Blakiston, Philadelphia. On sale by J. F. Meegan, 23 Marietta street, Atlanta. Price 80 cents.

The author of this little cram-book or compend says that it is founded upon Dr. Ernst Kormann's "Compendium der Kinderkrankhuben," and that he has also drawn freely upon Henoch, Bouchut, Baginsky, Speinli, and others. It is concisely written, as was necessary for its purpose, which it fulfills well.

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ORIGINAL COMMUNICATIONS.

THE HISTORY AND INTRODUCTION OF ANESTHESIA IN SURGERY.*

IN COMMEMORATION OF THE SEMI-CENTENNIAL OF THE INTRODUCTION OF ETHER AS AN ANESTHETIC AGENT.

BY ROSWELL PARK, A.M., M.D., BUFFALO, N. Y.,
Professor of Surgery.

Fifty years ago to-day—that is to say, on the 16th of October, 1846—there occurred an event which marks as distinct a step in human progress as almost any that could be named by the erudite historian. I refer to the demonstration of the possibility of alleviating pain during surgical operations. Had this been the date of a terrible battle, on land or sea, with mutual destruction of thousands of human beings, the date itself would have been signalized in literature, and would have been impressed upon the memory of every schoolboy, while the names of the great military murderers who commanded the opposing armies would have been emblazoned upon monuments and the pages of history. But this event was merely the conquest of pain and the alleviation of human suffering, and no one who has ever served his race by contributing to either of these results has been remembered beyond his own generation or outside the circle of his immediate influence. Such is the irony of fate. The world erects imposing monuments or builds tombs, like that of Napoleon, to the memory of those who have been the greatest destroyers of their race; and so Cæsar, Hannibal, Genghis Khan, Richard the Lionhearted, Gustavus Vasa, Napoleon, and hundreds of other great military murderers have received vastly more attention, because of their race-destroying propensities and abilities, than if they had ever fulfilled fate in any other capacity. But the men like Sir Spencer Wells, who has added his 40,000 years of life to the total of human longevity; or like Sir Joseph Lister, who has shown our profession how to conquer that arch enemy of time past, surgical sepsis; or like Morton, who first publicly demonstrated how to bring on a safe and temporary condition of insensibility to pain, are men more worthy, in our eyes, of lasting fame, and much greater heroes of their times, and of all time, yet are practically unknown to the world at large, to whom they have ministered in such an unmistakable and superior way.

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* Abstract of a lecture delivered at the Medical Department, University of Buffalo, October, 16, 1896. Published in full in *Buffalo Medical Journal*, November.

From all time it has been known that many different plants and herbs contained principles which were narcotic, stupefying or intoxicating. These properties have especially been ascribed to the juices of the poppy, the deadly nightshade, henbane, the Indian hemp and the mandragora, which for us now is the true mandrake, whose juice has long been known as possessing soporific influence. Ulysses and his companions succumbed to the influence of *nepenthe;* and, nineteen hundred years ago, when crucifixion was a common punishment of malefactors, it was customary to assuage their last hours upon the cross by a draught of vinegar with gall or myrrh, which had real or supposititious narcotic properties. Even the prophet Amos, seven hundred years before the time of Christ, spoke of such a mixture as this as "the wine of the condemned," for he says, in rehearsing the iniquities of Israel by which they had incurred the anger of the Almighty: "And they lay themselves down upon the clothes laid to pledge by every altar, and they drink the wine of the condemned in the house of their God" (Chap. II., verse 8), meaning thereby undoubtedly that these people, in their completely demoralized condition, drank the soporific draught kept for criminals. Herodotus mentions a habit of the Scythians, who employed a vapor generated from the seed of the hemp for the purpose of producing an intoxication by inhalation. Narcotic lotions were also used for bathing the people about to be operated upon. Pliny, who perished at the destruction of Herculaneum, A. D. 79, testified to the soporific power of the preparations made from mandragora upon the faculties of those who drank it. He says: "It is drunk against serpents and before cuttings and puncturings, lest they should be felt." He also describes the indifference to pain produced by drinking a vinous infusion of the seeds of eruca, called by us the rocket, upon criminals about to undergo punishment. Dioscorides relates of mandragora that "some boil down the roots in wine to a third part, and preserve the juice thus procured, and give one cyathus of this to cause the insensibility of those who are about to be cut or cauterized." One of his later commentators also states that wine in which mandragora roots have been steeped "does bring on sleep and appease pain, so that it is given to those who are to be cut, sawed or burnt in any parts of their body, that they may not perceive pain. Apulieus, about a century later than Pliny, advised the use of the same preparation. The Chinese, in the earlier part of the century, gave patients preparations of hemp, by which they became completely insensible, and were operated upon in many ways. This hemp is the cannabis indica which furnishes the *hasheesh* of the Orient and the intoxicating and deliriating *bhang*, about which travelers in the East used to write so much. In Barbara, for instance, it was always taken, if possible, by criminals condemned to suffer mutilation or death.

According to the testimony of medieval writers, knowledge of these narcotic drugs was practically applied during the last of the Crusades, the probability being that the agent principally employed was this same hasheesh. Hugo di Lucca gave a complete formula for the preparation of the mixture, with which a sponge was to be saturated, dried, and then, when wanted, was to be soaked in warm water, and afterward applied to the nostrils, until he who was to be operated upon had fallen asleep; after which he was aroused with the vapor of vinegar.

Strangely enough, the numerous means of attaining insensibility, then more or less known to the common people, and especially to criminals and executioners, do not appear to have found favor for use during operations. Whether this was due to unpleasant after-effects, or from what reason, we are not informed. Only one or two surgical writers beside Guy de Chauliac (1498) refer in their works to agents for relief of pain, and then almost always to their unpleasant effects, the danger of producing asphyxiation, and the like. Ambrose Paré wrote that preparations of mandragora were formerly used to avert pain. In 1579, an English surgeon, Bulleyn, affirmed that it was possible to put the patient into an anesthetic state during the operation of lithotomy, but spoke of it as a "terrible dream." One Meisner spoke of a secret remedy used by Weiss, about the end of the XVII. century, upon Augustus II., king of Poland, who produced therewith such perfect insensibility to pain that an amputation of the royal foot was made without suffering, even without royal consent. The advice which the Friar gave Juliet regarding the distilled liquor which she was to drink, and which should presently throw her into a cold and drowsy humor, although a poetic generality, is Shakespeare's recognition of a popular belief.

Of course, of all the narcotics in use by educated men, opium has been, since its discovery and introduction, the most popular and generally used. Surgeons of the last century were accustomed to administer large doses of it shortly before an operation, which, if serious, was rarely performed until the opiate effect was manifested. Still, in view of its many unpleasant after-effects, its use was restricted, so far as possible, to extreme cases.

Baron Larrey, noticing the benumbing effect of cold upon wounded soldiers, suggested its introduction for anesthetic purposes, and Arnott, of London, systematised the practice, by recommending a freezing mixture of ice and salt to be laid directly upon the part to be cut. Other surgeons were accustomed to put their patients into a condition of either alcoholic intoxication or alcoholic stupor. Long-continued pressure of a part was also practiced by some, by which a limb could, as we say, be made to go to sleep. A few others recommended to produce faintness by excessive bleeding. It was in 1776 that the arch-fraud Mesmer entered Paris and began to initiate people into the mysteries of what he called *animal magnetism*, which was soon named mesmerism, after him. Thoroughly degenerate and disreputable as he was, he nevertheless taught people some new truths, which many of them learned to their sorrow, while in the hospitals of France and England severe operations were performed upon patients thrown into a mesmeric trance, and without suffering on their part.

In 1799, Sir Humphry Davy, being at that time an assistant in the private hospital of Dr. Beddoes, which was established for treatment of disease by inhalation of gases, and which he called The Pneumatic Institute, began experimenting with nitrous oxide gas, and noticed its exhilarating and intoxicating effects; also the relief from pain which it afforded in headache and toothache. As the results of his reports, a knowledge of its properties was diffused all over the world, and it was utilized both for amusement and exhibition purposes. Davy even wrote as follows of this gas: "As nitrous oxide, in its extensive operation, appears capable of destroying physical pain, it may probably be used with advantage during surgical operations in which no great effusion of blood takes place."

It is not at all unlikely that Colton and Wells, to be soon referred to, derived encouragement, if not incentive, from these statements of Davy. Nevertheless, Velpeau, perhaps the greatest French surgeon of his day, wrote in 1839, that "to escape pain in surgical operations is a chimera which we are not permitted to look for in our day."

Sulphuric ether, as a chemical compound, was known from the XIII. century, for reference was made to it by Raymond Lully. It was first spoken of by the name of ether by Godfrey in the Transactions of the London Royal Society in 1730, while Isaac Newton spoke of it as the ethereal spirits of wine. During all of the previous century it was known as a drug, and allusion to its inhalation was made in 1795 in a pamphlet, probably by Pearson.

Beddoes, in 1796, stated that "it gives almost immediate relief, both to the oppression and pain in the chest, in cases of pectoral catarrh." In 1815, Nysten spoke of inhalation of ether as being common treatment for mitigating pain in colic, and in 1816 he described an inhaler for its use. As early as 1812 it was often inhaled for experiment or amusement, and so-called "ether frolics" were common in various parts of the country. This was true, particularly for our purpose, of the students of Cambridge and of the common people in Georgia in the vicinity of Long's home. It probably is for this reason that a host of claimants for the honor of the discovery appeared so soon as the true anesthetic properties of the drug were demonstrated.

There probably is every reason to think that, either by accident or design, a condition of more or less insensibility to pain had been produced between 1820 and 1846, by a number of different people, educated and ignorant, but that no one had the originality or the hardihood to push these investigations to the point of determining the real usefulness of ether. This was partly from ignorance, partly from fear, and partly because of the generally accepted impossibility of producing safe insensibility to pain. So, while independent claim sprang up from various sources, made by aspirants for honors in this direction, it is undoubtedly as properly due to Morton to credit him with the introduction of this agent as an anesthetic as to credit Columbus with the discovery of the New World, in spite of certain evidences that some portions of the American continent had been touched upon by adventurous voyagers before Columbus ever saw it.

The terms "anesthesia" and the adjective "anesthetic" were suggestions of Dr. Oliver Wendell Holmes, who early proposed their use to Dr. Morton in a letter which is still preserved. He suggests them with becoming modesty, advises Dr. Morton to consult others before adopting them, but, nevertheless, states that he thinks them apt for that purpose. The word anesthesia, therefore, is just about of the same age as the condition itself, and it, too, deserves commemoration upon this occasion.

As one reads the history of anesthesia, which has been written up by a number of different authors, each, for the most part, having some particular object in view, or some particular friend whose claims he wishes especially to advocate, he may find mentioned at least a dozen different names of men who are supposed to have had more or less to do with this eventful discovery. But, for all practical purposes, one may reduce the list of claimants for the honor to four men, each of whose claims I propose to briefly discuss. These men were Long, Wells, Jackson and Morton. Of these four, two were dentists and two practicing physicians, to whom fate seems to have been unkind, as it often is, since three of them at least died a violent or distressing death, while the fourth lived to a ripe old age, harassed at almost every turn by those who sought to decry his reputation or injure his fortunes.

Crawford W. Long was born in Danielsville, Ga., in 1816. In 1839 he graduated from the Medical Department of the University of Pennsylvania. In the part of the country where Long settled it was a quite common occurrence to have what were known as "ether frolics" at social gatherings, ether being administered to various persons to the point of exhilaration, which in some instances was practically uncontrollable. Long's friends claim that he had often noticed that when the ether effect was pushed to this extent the subjects of the frolic became oblivious to minor injuries, and that these facts, often noticed, suggested to his mind the use of ether in surgical operations. There is good evidence to show that Long first administered ether for this purpose on the 30th of March, 1842, and that on June 6th he repeated this performance on the same patient; that in July he amputated a toe for a negro boy, but that the fourth operation was not performed until September of 1843. In 1844 a young man, named Wilhite, who had helped to put a colored boy to sleep at an ether frolic in 1839, became a student of Dr. Long's, to whom Long related his previous experiences. Long had never heard of Wilhite's episode, but had only one opportunity, in 1845, to try it, again upon a negro boy. Long lived at such a distance from railroad communication (130 miles) as to have few advantages, either of practice, observation, or access to literature. Long made no public mention of his use of ether until 1849, when he published "An Account of the First Use of Sulphuric Ether by Inhalation as an Anesthetic in Surgical

Operations," stating that he first read of Morton's experiments in an editorial in the *Medical Examiner* of December, 1846, and again later; on reading which articles he determined to wait before publishing any| account of his own discovery, to see whether any one else would present a prior claim. No special attention was paid to Long's article, as it seemed that he merely desired to place himself on record. There is little, probably no reasonable, doubt as to Long's priority in the use of ether as an anesthetic, although it is very doubtful if he carried it, at least at first, to its full extent. Nevertheless Long was an isolated observer, working entirely by himself, having certainly no opportunity and apparently little ambition to announce his discovery, and having no share in the events by which the value of ether was made known to the world. Long's strongest advocate was the late Dr. Marion Sims, who made a strong plea for his friend, and yet was not able to successfully establish anything more than has just been stated.

Horace Wells was born in Hartford, Vt., in 1815. In 1834 he began to study dentistry in Boston, and after completing his studies began to practice in Hartford, Ct. He was a man of no small ingenuity, and devised many novelties for his work. In December, 1844, he listened to a lecture delivered by Dr. Colton, who took for his subject nitrous oxide gas, the amusing effects of which he demonstrated to his audience upon a number of persons who visited the platform for that purpose. Wells was one of these. Wells, moreover, noticed that another young man, who bruised himself while under its influence, said afterward that he had not hurt himself at all. Wells then stated to a bystander that he thought that if one took enough of that kind of gas he could have a tooth extracted and not feel it. He at once called upon a neighboring dentist friend and made arrangements to test the anesthetic effects of the gas upon himself the next morning. Accordingly Colton gave him the gas, and Riggs, the friend, extracted the tooth; and Wells, returning to consciousness, assured them both that he had not suffered a particle of pain. He began at once to construct an apparatus for its manufacture. Dr. Marcey, of Hartford, then informed Wells that while a student at Amherst he and others had often inhaled nitrous oxide as well as the vapor of ether, for amusement, and suggested to Wells to try ether. After a few trials, however, it was found more difficult to administer, and Wells accordingly resolved to adhere to gas alone. This was in 1844, two years after Long's obscure experiments, of which, of course, they were ignorant. In 1845, Wells visited Boston for the purpose of introducing his discovery, and among others called upon his former partner, Morton, trying to establish the use of the gas. He soon became discouraged, however, and returned to Hartford, resuming his practice. There he continued to use gas for about two years, but failed to secure its introduction into general surgery, owing to prejudice and ignorance on the part of dentists and physicians alike.

Wells's claims have been advocated by many of his fellow-citizens, and in Bushnell Park, in Hartford, stands a monument erected by the city and State, dedicated to Horace Wells, "who discovered anesthesia, November, 1844."

C. T. Jackson was born in Plymouth, Mass., in 1805. He graduated in the Harvard Medical School in 1829, after which he went abroad, where he remained for several years, made the acquaintance of the most distinguished men, experimented in general science, electricity and magnetism, and even devised a telegraphic apparatus, similar to that which Morse patented a year later. Returning, in 1835, he opened in Boston a laboratory for instruction in analytical chemistry, the first of its kind in the country. In 1846 and 1847 he was much aroused by Morton's experiments with sulphuric ether, and claimed even that he had suggested the use of ether to Morton, claiming also that he had himself been relieved of an acute distress by inhalation of ether vapor, and that it was from reflection on the phenomena presented in his own case that the possibility of its use for relief of pain during surgical operations suggested itself to him. This led to a triangular conflict for the priority of discovery between Wells, Jackson and Morton, each claiming the honor for himself. Wells's health soon gave way. He went abroad and got recognition from the French Institute and the Paris Academy of Sciences, which did not, however, indorse his claim as discoverer nor accept nitrous oxide as an anesthetic. Wells returned to find that Morton was on the tide of popular favor, the public having indorsed ether as the only reliable anesthetic. His mind became unbalanced, and in a fit of temporary aberration he ended his own life in a prison cell in New York city in 1848.

In 1873, Jackson's mind gave way, and after seven years of confinement in an asylum he died in 1880, at the age of 75, having been the recipient of many honors from foreign potentates and learned societies.

William T. G. Morton was born in Charleston, Mass., in 1819. After a disastrous experience in business he was sent to Baltimore in 1840 and began the study of dentistry. In 1841 he entered the dental office of Horace Wells as student and assistant, becoming a partner in 1842. In 1843 the partnership was dissolved, Wells removing to Hartford, as before stated. Morton, ambitious for a medical degree, entered his name as a student in the office of Charles T. Jackson, in 1844, and the same year matriculated in the Harvard Medical School, though he never graduated. Having learned through Wells, of the latter's successful use of nitrous oxide gas, but not knowing how to make it, he sought the advice of Dr. Jackson, who informed him that its preparation entailed considerable difficulty, and inquired for what purpose he wanted it. On Morton's replying that he wished to use it to make patients insensible to pain, Jackson suggested the use of sulphuric ether, as Marcey had suggested it to Wells, two years previously, saying that it would produce the same effect and did not require any apparatus. Jackson also told Morton of the ether frolics common at Cambridge among the students. That same evening, September 30, 1846, Morton administered ether to a patient and extracted a tooth for him without pain. The next day he visited the office of a patent lawyer, for the purpose of securing a patent upon the new discovery. This lawyer ascertained that Jackson had been intimately connected with its suggestion, and came to the conclusion that a patent could not safely issue to either one independently of the other. But Jackson being a member of the State Medical Society, against whose ethical code it is to patent discoveries that pertain to the welfare of patients, and fearing the censure of his colleagues, agreed at once to assign his right over to Morton, receiving in return a 10 per cent. commission upon all that the latter made out of it. Morton, as a dentist, having no more compunction then than dentists have now upon the securement of a patent,—in other words, being actuated by no fine ethical scruples, —secured the patent, and then called upon Dr. J. Mason Warren, one of the surgeons in the Massachusetts General Hospital. Warren promised his coöperation and appointed the 16th of October, 1846, for the first public trial. Upon this occasion the clinic room was filled with visitors and students, when Morton placed the young man under the influence of his "letheon," as he called it then; after which Warren removed a tumor from his neck. The trial was most successful. Another took place on the following day, and on November 7th an amputation and an excision of the jaw were made, both patients being under the influence of letheon and oblivious to pain. At this time the nature of the anesthetic agent was kept a secret, the vapor of ether being disguised by aromatics so as not to be recognized by any one present.

True to the highest traditions of their craft the staff of the Massachusetts General Hospital now met and declined to make further use of a drug whose composition was thus kept secret. It was then that Morton revealed the exact nature of it as sulphuric ether, disguised with aromatic oils.

In 1846 an English patent was obtained.

Morton soon began the attempt to sell office rights, as do the dentists of to-day, while the medical profession was then, as ever, antagonistic to patents, holding them to be subversive of general good. His patent was soon opposed and then generally infringed upon. Litigation followed without end and the government stultified itself by refusing to recognize the validity of the patent issued by itself. And so, without any compensation to the discoverer, ether soon came into general use in this country as abroad. While receiving many congratulations from friends and humanitarians, Morton's success aroused the jealousy of some of his professional brethren, among them one Dr. Flagg, who commenced a terrible onslaught upon the new application of ether and its promoter. By his machinations a meeting of Boston dentists was called and a committee of twelve appointed to make a formal protest against anesthesia. This committee published a manifesto in the *Boston Daily Advertiser*, in which all sorts of untoward effects and unpleasant results were attributed to the new anesthetic. This proclamation was spread broadcast, and did Morton, for the time, very much harm.

These and similar statements created a very strong prejudice against Morton, who, in December, 1846, sent to Washington, to a nephew of Dr. Warren, to endeavor to urge upon the government the advantages of employing ether in the army during the Mexican war, then in progress. The chief of the Bureau of Medicine and Surgery reported that the article might be of some service for use in large hospitals, but did not think it expedient for the department to incur any expense by introducing it into the general service; while the acting surgeon-general believed that the highly volatile character of the substance itself made it ill-adapted to the rough usage it would necessarily encounter upon the field of battle, and accordingly declined to recommend its use.

In January of 1853, Morton demonstrated at the infirmary in Washington, before a congressional committee and others, the anesthetic effect of ether, which he continued through a dangerous and protracted surgical operation. This was the result of a challenge to compare the effects of nitrous oxide and those of ether, the advocates of the former not putting in an appearance.

The balance of Morton's life seems to have been spent in continued jangles. The government, having repudiated its own patent, was repeatedly besought by memorials and through the influence of members of Congress to bestow some testimonial upon or make some money return to Morton for his discovery. Several times he came near a realization of his hopes in this respect, when the action of some of his enemies or the termination of a congressional session, or some other accident, would doom him again to disappointment. The pages of evidence that were printed, the various reports issued through or by government officers, the memorials addressed from various individuals and societies, if all printed together would make a large volume; but all of these were of no avail. Morton spent all his means, as he spent his energies and time, in futile endeavor to get pecuniary recognition of his discovery, but was doomed to disappointment. He seemed alike a victim of unfortunate circumstances and of treachery and animosity upon the part of his opponents. Especially did the fight wage warm between him and his friends and Jackson. Plots to ruin his business were repeatedly hatched and his life was made miserable in many ways. Mere temporary sops to wounded vanity and impaired fortune were the honorary degrees and the testimonials that came to him from various institutions of learning and foreign societies. In 1850 both Morton and Jackson received from the French Academy prizes valued at 2,500 francs each. Finally, Morton fell into a state of nervous prostration, suffered from anxiety and insomnia, and in a fit of temporary aberration exposed himself in Central Park, New York, became unconscious and was taken to St. Luke's hospital, dying just as he reached the institution, on the 15th day of July, 1868. In Mount Auburn cemetery, in Boston, there stands a beautiful monument to William T. G. Morton, bearing this inscription : " Inventor and revealer of anesthetic inhalation, before whom in all time surgery was agony ; by whom pain in surgery was averted and annulled ; since whom science has control of pain."

Summing up, then, the claims of our four contestants in the light of a collected history of the merits of each, it would appear that Wells first made public use of nitrous oxide gas for limited purposes, but failed to introduce it into general professional use. That Long, in an isolated rural practice, a few times used ether, with which he produced probably only partial insensibility to pain, and that he had apparently discontinued its use before learning of Morton's researches. That Jackson made no claim to the use of the agent on his own part, but simply having suggested it to Morton. And finally that Morton quickly accepted the suggestion, made careful and scientific use thereof, but especially, and above all other things, first *demonstrated* to the world at large the capability and the safety of this agent as an absolute, reliable and efficient anesthetic. So, though Morton permitted his cupidity to run away with finer ethical considerations, and attached a higher pecuniary than humanitarian value to sulphuric ether, he, nevertheless, must be generally credited with having, to use the modern expression, "promoted" its introduction, and to have shown to the world at large what an inestimably valuable therapeutic agent had been added to our resources for the control of pain.

THE TREATMENT OF SPRAINED ANKLE.*

By W. S. ELKIN, M.D.,
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I regret that I have not had time to prepare a paper for to-night, as I promised; but I will make a few remarks on this subject anyhow and give you a practical demonstration of the method of treating sprained ankles with adhesive plaster.

We all recognize that a sprained ankle is of frequent occurrence, and realize the fact that the use of plaster-of-paris dressing in the treatment of these injuries is not altogether satisfactory. It is heavy and uncomfortable, often painful, and necessitates the use of crutches, whereas the treatment I am about to detail gives no pain or inconvenience, requires no crutches and is not followed by any loss of function of the joint. The method I advocate was first suggested to me by Dr. V. P. Gibney, of New York, yet he lays no claims to priority, but gives the credit to Mr. Edward Cotterell, of London. All that is needed is a roll of good rubber adhesive plaster, Seabury & Johnson's answers the purpose admirably, a pair of scissors, and a cotton roller bandage two or three yards long and two inches wide. I generally get the three-inch rolls of plaster and cut them or tear them into strips about one inch wide, and from ten to fourteen inches long; the number of strips used will depend upon the size of the foot, and the character of sprain. After the foot has been thoroughly cleansed with soap and water, it should be elevated and vigorously massaged for a few minutes in order to render it more or less bloodless and reduce the swelling; then the strips are applied to the surface of the skin, completely covering the seat of injury. In order to give you a practical demonstration of this method of treatment, I will have this boy remove his shoe and stocking, and put on a dressing for a sprained ankle involving the external malleolus. The same treatment is applicable to the inside of the foot. I begin with my adhesive strip on the outer side of the foot at the base of the little toe, carrying it around the heel and under the plantar arch to the base of the big toe; the next strip begins on the outer side of the leg at the junction of the middle and lower third, is carried down the outer side of the tendo Achilles, under the heel, and up the inner side of the same tendon a few inches above the internal malleolus. Alternate strips are applied, each overlapping the other about one-half its width until the external or injured side of the foot is completely encased. You will observe when the dressing is complete that a small space over the dorsum is not covered with the strip, but is left free intentionally to prevent strangulation should any subsequent swelling occur. If the tarsal or mid-tarsal joints are involved, and the whole foot is swollen, Dr. Gibney suggests that the strips be applied in this manner: Begin the first strip on the inner surface of the heel, carry it back over the heel and over the dorsum of the foot, terminating at the base of the big toe. The second strip starts on the outer side of the heel, below the external malleolus, goes over the heel and dorsum of the foot to the base of the little toe; then other strips are applied in a similar manner until the whole surface is covered in. If the toes be very much swollen, he suggests that they be strapped separately before the other strips are applied. I have seldom found it necessary to adopt this latter method of applying the strips; the other plan meets all indications, and in my hands has proven more comfortable to the patient. After the rubber plaster has been applied, a smooth fitting roller bandage should envelop the foot and ankle, and the patient directed to put on his shoe, walk around the room a few times and then return to his home or business. As soon as the heat of the body causes the plaster to firmly adhere to the surface of the skin, and to adapt itself smoothly to the contour of the foot, the roller bandage can be removed. In the course of a week, or perhaps less time, the strips should be removed and new ones applied, and this continued until the swelling has disappeared and the ankle cured, which generally occurs in a week or ten days. For the past three or four years I have used no other treatment for sprained ankles, both in my hospital and private practice, and have yet to see a case that has not been speedily cured with no subsequent impairment of the function of the joint. Two or three years ago I had the misfortune to sprain my own ankle while trying to board a street-car, and had Dr. Cooper treat me in the manner described, with immediate relief and no loss of time from my work.

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*Remarks at the Atlanta Society of Medicine, November 17, 1896.

Recently a case came under my observation at the Grady Hospital in which the injury was so severe that I hesitated at first to use this treatment. The foot, toes and leg were greatly swollen, with much edema and ecchymosis in the neighborhood of the external malleolus. After satisfying myself that no fracture existed I decided to apply the rubber strips. Although the patient was brought to the hospital in an ambulance, he walked to his place of business after the dressing was applied. I renewed the strips three times in this case, and a perfect cure resulted in three weeks. I am unable to state how this treatment acts, but I am confident you will be pleased with the results obtained from its use.

DISEASES OF THE RECTUM AND ANUS.*

BY. GEO. K. SIMS, M.D., RICHMOND, VA.,
Adjunct Professor of Clinical Surgery, University College of Medicine.

Formerly this class of diseases received but little attention by the profession; consequently quacks fell heir to a great many of them. In recent years they have received more attention, but the majority of the profession do not give them as much attention as they merit. There is no class of diseases that cause more annoyance or suffering, or that patients will be more grateful for curing them, or more willing to pay for. Time will permit me to give only a general outline of the most important of them to-night.

A *careful physical examination* should be made in every case. The dorsal is the best position for external inspection and eversion of the anal margin; for parts higher up and for operation, the knee-chest and the lateral or Sims' position is better. A female should always be placed in the Sims position, for obvious reasons.

In making the examination, the tissues surrounding the anus should first be carefully inspected; after this, the interior of the rectum must be examined. This can be done either with the finger or the speculum, or both. A digital examination will be more agreeable to the patient if the finger is well lubricated and introduced gently. The best lubricant for the finger that I have used is ordinary toilet soap; it fills the cracks around and under the nail, and prevents the fecal matter from sticking. This can be easily washed out, and you get rid of the bad odor, which is a very important consideration. If there is much soreness about the parts, carbolized vaseline will be much more agreeable to the patient.

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*Read before Richmond Academy of Medicine and Surgery, October 13, 1896.

In introducing the finger, notice the amount of resistance offered by the sphincters. The internal is an involuntary and the external is a voluntary muscle; they are separated by a well marked interspace. A firmly contracted sphincter is met with in cases of fissure ani; a loosely contracted one may be due to atony or paralysis, induced by repeated stretching by a polypus, hemorrhoids, or prolapsus. After passing the sphincter, the finger enters a large cavity called the rectal pouch, which is apparently without shape or form; if empty, the anterior and posterior walls are in contact. A great aid to digital examination is to fill the rectum with air or water, introduced by an ordinary bulb syringe. This puts the wall of the rectum on the stretch, so that any diseased condition can more easily be detected. After the digital examination, it may be necessary, for purposes of diagnosis or treatment, to introduce the speculum; in many cases it will be necessary to give an anesthetic to do this, or even to insert the finger.

1. *Hemorrhoids.*—The first subject I wish to review is *hemorrhoids.* Of these there are two varieties—external and internal—depending on their relation to the sphincter. *External piles* are venous or cutaneous. Of the former, there are two kinds; first, a varicose condition of the external hemorrhoidal veins; this is very common, and usually requires no treatment; the second is the thrombic pile, due to a thrombus in the external hemorrhoidal veins. A *thrombic pile* is tense, hard, and very painful; it usually comes on suddenly, and the bluish appearance of the thrombus can often be seen. The treatment may be palliative, which consists in keeping the stools very soft by laxatives and enemas, and the local

application of soothing lotions or unguents, such as lead and opium wash, fluid hydrastis or hamamelis and lead-water, or unguents of belladonna, opium, etc., followed by warm fomentations. If the size of the tumor or the pain seems to justify it, immediate relief may be given by incising the pile and turning out the clot—then applying a pad of antiseptic gauze and firm pressure by a "T" bandage to prevent the cavity from refilling.

Of *cutaneous piles*, authors recognize three varieties: First. Redundant cutaneous piles. These are common in persons having internal piles, and are said to be diagnostic of that condition, with weakening of the internal sphincter. The second form is the hyperplastic pile; this is due to a hyperplasia of the connective tissue, from abrasions, fissure or ulceration. It is most often seen at the posterior border of the anus in connection with fissure ani—in fact it is pathognomonic of that disease. The third form is a hypertrophy of the normal radiating folds of the anus, the result of eczematous inflammation. The treatment of these conditions consists in removing the cause; then, if necessary, a portion of the redundant tissue may be excised and treated antiseptically. External piles should never be injected, as it can do no good, and causes unnecessary torture.

Internal hemorrhoids are vascular tumors—composed of dilated veins, capillaries and small arterioles. Ordinarily, they lie just within the anal opening, but they may extend as high as two inches from the anus; they may be single or multiple. They are caused by an increase of blood pressure about the rectum with obstruction to the return circulation, arising from diseases of the heart, lungs, or liver, enlarged prostate, stricture of the urethra, stone in the bladder, phimosis, cancer, or stricture of the rectum, and chronic constipation. Symptoms—a feeling of weight, itching, tenesmus, and pain, which may radiate to the genital, or other pelvic organs. At first these are slight, but they gradually grow worse. The piles begin to protrude when at stool; later, a portion of the mucous membrane may prolapse. If they are not replaced, the contraction of the sphincter muscle will cause them to become swollen and congested, and gangrene may result. Rupture of the thin mucous membrane covering them causes hemorrhage—this may be very slight, or be several ounces. The blood is much redder than blood which escapes higher up than the rectum. The bleeding often relieves the pain and local symptoms for a time; but if it occurs frequently, as it often does, may cause serious anemia. In long standing cases, the sphincter becomes so relaxed that it allows the protrusion of the piles to exist almost constantly.

The diagnosis, when they are protruding, is simple enough; but when they are not filled with blood, your finger may scarcely feel them. In that case, after emptying the rectum with an enema, make the patient bear down as if at stool; at the same time draw the anus open with your fingers. They may now be seen or felt, as they become distended. The smooth folds of mucous membrane of prolapse will hardly be mistaken for piles, as they lack the bunched appearance and the purplish color.

Rectal polypus, when protruding, is harder than piles or prolapse, and has a distinct pedicle.

Treatment.—The majority of cases can be made very comfortable, if taken in time, by palliative measures; they consist in keeping the bowels open by diet, exercise, salines, laxatives and enemas. Try to remove the cause by appropriate treatment. Locally use astringent injections and unguents; these should be pushed well up into the rectum. When these measures fail to give relief, a more radical treatment becomes necessary. Moderately severe cases may at times be cured by dilatation of the sphincter, by means of the two thumbs. This requires an anesthetic, and must be done thoroughly. When the patient cannot take chloroform, or remain in bed for a few days, a cure may be effected by injecting a few drops of carbolic acid into the center of each pile, treating only one at a time. This is tedious and uncertain at best, and not to be recommended. A better method of treating such cases is the one described by Dr. Earle, of Baltimore; this consists in injecting cocaine, applying a clamp, cutting off the pile, and stitching the edges together with a continuous suture of catgut. By treating only one pile at a time by this method, the patient need not lose any time from business.

When, however, the piles are large and numerous, they had better be all removed at one sitting, by one of the standard operations, which are the clamp and cautery, ligation, and Whitehead's. Of these three, the clamp and cautery is the one most generally used, being, at the same time, simple, safe, and effective. I will not enter into the details of these operations, but will mention a few practical points in the management. The patient should have a brisk cathartic two days before, and an enema the day before, and on the day of operation. The sphincter should be well stretched and temporarily paralyzed at the time of operation. No packing is necessary afterwards except a good external pad and a "T" bandage.

The bowels can be removed on the third or fourth day with salines or enemata. The patient must be kept in bed five or six days, and in a week can be discharged.

2. *Anal fistulas* may be complete or incomplete—the latter are external and internal. They result from a peri-rectal or an ischio-rectal abscess, which was not opened early enough to prevent the formation of an orifice in the bowel. The sinus is prevented from healing by the passage of fecal matter and gases which keep up the irritation. The fistulous track is usually tortuous, and there are frequently blind sinuses leading off from it into the cellular tissues surrounding the rectum. Sometimes it goes around the bowel and comes out on the opposite side, forming a horseshoe fistula. An internal sinus, if left to nature, will sooner or later make an opening on the skin ; but it may burrow into the ischio-rectal fossa a long time before it does so.

The *diagnosis* is easily made when the external or internal opening is found, but it is often difficult to find the internal opening. It will usually be found within the grasp of the internal sphincter —occasionally higher up. The sinus may extend above the internal opening and rarely a second opening is present. If the probe, carefully, passed into the sinus, fails to find the internal opening, inject some hydrogen dioxide into it; it will frequently find its way through, and can be seen foaming in the rectum. It must be remembered that a sinus opening far down the thigh may lead to the rectum. On the other hand, we should not forget that a sinus in the neighborhood of the anus may be due to caries of the tuberosity of the ischium, or coccyx, or even hip-joint disease, and have no connection with the rectum. In incomplete fistulas, there is an intermittent discharge of pus from the anus, especially when pressure is made upon the circum-anal integument.

Treatment.—Injecting the fistula with stimulating solutions is usually unavailing. An operation is almost always necessary to make a cure. Fistulæ resulting from stricture or malignant disease of the rectum, should not be operated on unless the primary cause can be removed. All abscesses in this region should be opened early, curetted, and treated antiseptically; this can often be done at the office, under cocaine. A very good method of treating many cases is the elastic ligature; draw it tight, and allow the patient to go about his business. The pain is quite severe for the first day or two. In three to seven days the ligature will cut through, and while it is cutting, the tract is beginning to granulate behind it, so that when it has cut through, two-thirds of the tract will be healed. The rest of it will heal after a few applications of silver nitrate, and aristol, iodoform or loretin. The ideal treatment is to incise all the structures between the two openings on a grooved director, also lay open any communicating sinuses; the fistulous tract should then be scraped out with a curette, or dissected out, washed out with a 1:3000 bichloride solution, and the walls brought together by catgut sutures. Aristol or loretin should then be applied and the bowel confined for four or five days. In incomplete internal fistulæ, find the orifice, then pass a grooved director, from within, against the skin, make an opening here, then incise all the structures, and proceed as in the complete fistula. When it is impossible to clean out the fistulous tract thoroughly, they should be washed out with hydrogen dioxide, then kept packed with iodoform gauze to make them heal up from the bottom. The rectum should be washed out with an antiseptic solution after every evacuation and fresh gauze packing applied.

3. *Anal fissure* is a linear ulcer situated just within the verge of the anus. It results from a tear or excoriation in the mucous membrane of the sphincter, caused by hardened feces, syphilis, or the irritating discharges of diarrhea or dysentery. It fails to heal because of the frequent irritation by fecal matter, and the motion and spasm of the sphincter.

The *symptoms* of anal fissure are remarkable for the severity of the pain, which is intense, notwithstanding the insignificance of the lesion. It comes on during defecation, and may last for many hours. The manner in which it is reflected may cause the patient to attribute his suffering to disease of the bladder, urethra, or other pelvic organs. The dread of the intense pain causes the patient to refrain from emptying the rectum, and constipation results. Spasm of the sphincter muscle is the cause of this agonizing pain, and is always present in true anal fissure. It is often so great that it is impossible to pass the finger into the rectum, or to make a satisfactory examination without an anesthetic.

Treament.—In recent cases, a cure can often be effected by keeping the feces soft by laxatives and enemata, washing out the rectum with carbolic acid or other antiseptic solution after each evacuation, the application of silver nitrate, and some antiseptic powder or unguent to the ulcer. When this treatment fails, as it often will in chronic cases, the next best treatment is to thoroughly paralyze the sphincter by stretching it with the thumbs. Complete anesthesia is required for this operation. Another method, said to be more effectual than dilation, is to make an incision through the base of the ulcer, dividing either the whole or a portion of the sphincter. Any small tab of mucous membrane or polypoid growth complicating the fissure, should be removed at the time of operation.

4. *Prolapse of the rectum* may be partial when the mucous membrane only protrudes, or complete when all its coats are involved, the rectum being turned inside out. The disease is most common in children and the aged, from a weakened condition of the tissues. Anything that causes abnormal straining and bearing down—as stone in the bladder, urethral stricture, polypus, dysentery, chronic constipation, or phimosis—may be the exciting cause.

The *diagnosis* is usually very simple; the prolapsed tissues appear at first only when at stool, but frequent repetition of the process soon weakens the sphincter so that the prolapse occurs whenever the patient walks or assumes the erect posture. If allowed to remain out long, the tissues become so much swollen that it is difficult to reduce, and strangulation and gangrene may result.

Treatment.—The prolapsed tissues must be reduced by gentle, though firm, pressure with the fingers, using some lubricant on the parts. During the reduction, the patient should assume the knee-chest or the lateral (Sims) position. If these measures fail, cover the finger with a piece of lint and insert it into the orifice of the protruded bowel and push it in slowly and gently. After it is reduced, the finger is withdrawn, and subsequently the lint is pulled out. The rectum must be supported by a T bandage, or strips of adhesive plaster, applied so as to hold the nates close together to prevent recurrence. The bowels must be kept soft, and any trouble that is likely to produce straining must be removed. The patient should lie on the side or back or stand while evacuating the bowels. Astringent enemas, ointments and suppositories are serviceable.

Under such a line of treatment, cases occurring in children and cases of moderate severity in adults, can be cured. The more serious cases require surgical treatment. With a thermo-cautery, make several longitudinal applications to the prolapsed tissues. Another method is to clamp longitudinal portions of the mucous membrane, which is then cut off, and the stump seared with a red-hot cautery iron. In chronic cases, in which the sphincter has become relaxed, the triangular portion of the sphincter, and also a portion of the posterior wall of the rectum, may be removed; sutures are then applied so as bring the divided walls together.

Ulceration of the rectum may be dysenteric, syphilitic, tuberculous, or malignant. The exciting cause is often constipation. It is most common among the aged, and is often mistaken for dysentery. Symptoms: Irregular diarrhea, pain, tenesmus, muco-purulent, and blood-stained discharges and other symptoms of dysentery. Ulceration in the upper part of the rectum is far less painful than in the lower part, within the grasp of the sphincter.

Treatment.—Keep the excreta soft, wash out the rectum after each stool, and use mild, astringent, antiseptic and anodyne enemas and suppositories. A weak carbolic solution is very soothing and healing. An enema of laudanum in starch water will relieve the pain. Tubercular ulcers require iodoform, and syphilitic cases require the iodides and mercury, in addition to the local treatment.

621 *Franklin Street.*

THREE CASES OF POST-TYPHOID NEURITIS.

BY GEO. J. PRESTON, M.D.,
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That neuritis is not a common complication of typhoid fever is evident from the fact that during my connection with the city hospital for several years, I have not seen a single case in the wards there. Osler reports but four cases of neuritis in 389 cases of typhoid treated at the Johns Hopkins Hospital. It is not uncommon during the course of typhoid fever to have the patient complain of pains in the limbs, and this sometimes appears to be a distinct local neuritis. Hanford and Osler have both called attention to the "tender toes," which would seem to be a mild form of local neuritis. The graver forms are apt to appear during, or shortly after, convalescence. The following are examples of the severer forms:

CASE 1. The patient, a young man, had never had any severe illness. Was taken with fever May 25th, and came to the hospital on the 30th. The fever ran a typical course, reaching 105 degrees. On July 8th he suffered a relapse, and fever again became very high. He continued in a critical condition until July 21st. With the beginning of convalescence he began to complain of pain in the legs, the slightest contact with the bed clothes producing great suffering. For three or four days there was an erysipelatous blush over the right leg, and later a small abscess developed at the ankle. The pain in the legs continued, and an examination at this time showed loss of patellar tendon reflex, some atrophy, double foot drop, and a reaction of degeneration. There was no marked disturbance of sensation. He slowly recovered the use of his limbs, and is now perfectly well.

CASE 2. The hospital nurse was taken with typhoid fever June 9th, and the disease ran a very severe course, with high temperature, and the patient was delirious for four weeks. On the fourth day after the subsidence of fever the patient complained of very severe pain in the right arm and leg, with inability to move the affected parts. In ten days the pains subsided. At this time, after spending a day in the country, the pain returned with great violence, spreading over the whole body, but most intense in the left leg. The leg showed some edema, and was hyperesthetic. At the present time there is loss of patellar tendon reflex, muscular atrophy, and the reaction of degeneration in both lower extremities, with double foot drop. The patient has very little power of motion in the lower limbs, and the grasp of the hand is very weak. There has been no disturbance of the bladder or rectum, and during the whole course of the disease very little loss of sensation.

CASE 3. Young man of 28 years developed typhoid July 25th, 1895. Previous to this he had shown signs of pulmonary tuberculosis. The disease ran a usual course of about five weeks, bed sores developed, and the temperature assumed a septic type. At this time there appeared an intense hyperesthesia most marked in the lower extremities, and paralysis of the extensor muscles of both arms and legs followed by atrophy. There was a gradual return of power, though the paralysis never entirely disappeared. The arms recovered more perfectly than the legs. The patient died from nephritis.

These cases illustrate the severer forms of neuritis, and there can be no doubt of the etiological influence of typhoid fever. A point of very great interest, and one that is not yet determined, is whether inflammation, beginning in the nerve trunk, or many nerve trunks, may, by direct continuity, involve the spinal cord. Some cases of tabies are extremely suggestive of this possibility. If such a theory can be established, then post-febrile neuritis would become of very great importance. A clinical point worth noting, and one that has attracted my attention for some years, is that cases of neuritis may present very marked motor disturbances, amounting, at times, to complete paralysis, without showing, or at least very trivial, sensory disturbances. The possibility of the etiological bearing of neuritis upon the degenerative cord diseases and the necessity of more careful treatment of the former is worthy of attention. I am a firm believer in the great utility of electricity in the treatment of neuritis, local or generative, and think that careful electrical treatment greatly hastens the recovery.

SYSTEMATIC INSPECTION OF THE EYE.*

BY H. E. STAFFORD, M.D., NEW YORK.,
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GENTLEMEN:—As many new faces are in the class to-day, I shall devote part of this lecture to a consideration of the routine inspection of the eye.

It is well to proceed from without inward. With the patient in a good light, before touching the eyes or lids, note the form, color, and mobility of the lids, the width and length of the palpebral fissure, the position and appearance of the eyelashes, any evidences of discharge, and any redness of the exposed globe. Inspect the lachrymal sac at the nasal corner of the eye, pressing it with the fingers, and at the same time note any discharge and the character and consistency of it. Next, test the tension of the ball. Direct the patient to look down and close the lids. Place the tips of the two index-fingers on the upper lid just above the cartilage and press alternately just as in feeling for fluctuation in a swelling. It is necessary to know, of course, the tension of the normal eye. Normal tension is usually designated by T; a slight increase by T + 1; a greater increase by T + 2; and a stony hardness by T + 3. A perceptible softening is represented by T — 1; more decided softening by T — 2; and a complete loss of tension by T — 3.

Now separate the lids gently—use no force. Notice the puncta lachrymalia, upper and lower, their position and appearances. Evert the lids. The lower is everted by simply pulling the lid down and asking the patient to look up. This exposes the lower conjunctiva. To evert the upper lid request the patient to look down, then grasp the eyelashes growing from about the middle of the lid, and with a pen-handle or match-stick or finger of other hand making a little downward pressure about half an inch from the free border of the lid, draw the lid gently downward, forward, and then upward; the torsal cartilage will thus be made to fold over and the upper conjunctival surface is exposed. This maneuver is usually necessary in searching for foreign bodies in the eye. Very often a foreign body will be found adhering to the inner surface of the upper lid. Small bodies which have become fixed beneath the lower lid are almost invariably near its tarsal margin. Having everted the lids notice the redness, the degree of swelling and character of the conjunctival and subconjunctival tissues. Note any cicatrices (remains of old trachoma), new growths and any changes in color. Normally these tissues are transparent, and we can readily see through them and the little yellowish striæ that mark the position of the Meibomian glands and ducts. A simple redness or hyperemia of the conjunctiva, which gives rise to the so-called bloodshot appearance, will reveal, on close inspection, an enlargement and prominence of the vessels on the inside of the lid. This condition is usually caused by foreign bodies, smoke or dust, eye-strain, excessive weeping or exposure of the eye to the glare of the sun on snow or white sand, etc. Subjective symptoms are photophobia, lachrymation, and a smarting sensation. The redness due to inflammation of the conjunctiva is generally most prominent on the inner surface of the lids, becoming less as the conjunctiva passes over to the globe and still less near the margin of the cornea, differing thus from the peri-corneal hyperemia which comes from lesions of the cornea, iris, and ciliary body. When the latter become inflamed their enlargement causes the appearance of a pinkish zone, most deeply colored at the corneal margin and shading off gradually into that of the white sclera. It should be remembered that both kinds of hyperemia may exist together.

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*Abstract of Lecture delivered at New York Polyclinic, July 30th. From notes by Dr. F. L. Oswald, Clinical Assistant.

Swelling of the conjunctiva may be a general thickening, as in acute or chronic conjunctivitis; in the former there is a true exudation into the tissues, the latter is more of a hyperplasia; or there may be only an unevenness of the surface, as in granular or chronic conjunctivitis.

Next examine carefully the cornea, iris, and lens. This is best done in a good light under oblique illumination by means of a convex lens whose focal distance is about two inches. This may be used in ordinary daylight, or still better by gaslight in a dark room. The lens is held about two inches from the eye, condensing the light on one side of it while the observer looks from the other. Notice any hyperemia, and whether it be superficial, as in conjunctivitis, or deep, as in the irregular purple patches of a scleritis. Notice any hemorrhages, likewise any phlyctenular spots consisting of small elevations with an abraded surface surrounded by a zone of hyperemia.

The pupil should be tested as to its size, clearness, and mobility, and a comparison made with the opposite pupil. Note the color and contractility of the iris (the latter being tested by placing the hand close to eye for a moment and then suddenly withdrawing it, allowing a good light to fall upon the eye). Notice any irregularity in the shape of the pupil, and whether the iris is adherent to the cornea (anterior synechia), or to the capsule of the lens (posterior synechia). Compare the two eyes and see if both irides are alike. When in doubt about the existence of iris adhesions the instillation of atropine will settle the question.

The Cornea.—The healthy cornea is of the most perfect transparency, and its surface smooth and brilliant. These qualities are lost as soon as the part becomes inflamed, a general haziness overspreads the whole surface, and it looks more or less like ground glass. If a healthy eye be examined in front of a window, a perfect image of the window frame should be reflected from the corneal surface. Even a slight inflammation of the cornea, just enough to produce thickening of epithelium, destroys this smooth reflecting surface and causes the window image to appear dull and blurred and the lines of the sash frame wavy and crooked. This appearance is often important in making an early diagnosis of inflammation of the cornea. It may also be seen in the early stages of glaucoma. Examine for opacities and ulcers of the cornea. Note any alteration in its shape and curvature. Ascertain if the cornea or conjunctiva, if touched by a fleck of cotton or hair, exhibit their proper sensibility.

Be sure to notice the depth of the anterior chamber. A shallow anterior chamber is always indicative of glaucoma, unless it be due to a loss of the aqueous humor. In glaucoma we have also a dilated pupil, resembling in this respect a serous iritis, but differing from the latter in having a shallow anterior chamber. Examine carefully, under oblique illumination, for pus in the anterior chamber (hypopyon).

The crystalline lens should receive especial care. Ascertain whether the lens be clear, smoky, or positively opaque. As all opacities of the lens are of the nature of a cataract, you will see the importance of being able to diagnose it correctly and of telling your patient the proper time for its extraction. This examination is best made by direct and oblique illumination in a dark room. The pupil should be fully dilated with atropine.

Notice the mobility of the eyes by requesting the patient to watch and follow your finger as this is moved in different directions. Thus paralysis of any muscle may be detected.

It may be impossible at one sitting to accomplish all of what I have proposed above on account of pain, or fear, or photophobia, or refusal of the patient to submit to a complete examination. Pain and photophobia may be obviated by the use of cocaine, four-per-cent. solution. With children an anesthetic may be necessary.

For examination of the posterior parts of the eye the ophthalmoscope will be necessary. Description of its use will be deferred till another lecture.

SOME REMARKS ON THE THERAPEUTICS OF FERRATIN AND LACTOPHENIN.

BY T. V. HUBBARD, M.D., ATLANTA, GA.,
Assistant to Chair of Materia Medica and Therapeutics, Atlanta Medical College.

The profession is well aware of the fact that the administration of the inorganic salts of iron does not always give satisfactory results, and the pharmacists have been for some time endeavoring to secure an iron compound which would not only meet the indications required and relieve the condition for which it was administered, but do so quickly and pleasantly, without the production of the undesirable symptoms of headache, constipation, and disturbance of the stomach which so often accompanies the administration of these agents. So far as my experience and observation go I think we have in the preparation known as ferratin a therapeutic agent which is destined to supplant to a large extent the inorganic salts of iron. It is a rusty colored powder, insoluble in water, but soluble in alcoholic solutions, and can be administered in tablet or powder form, as it is practically odorless and tasteless. The dose is from seven and one-half to fifteen grains three times daily. Ferratin is extracted from the liver of the pig and is supposed to represent the natural form in which iron is taken into the system with food. It is easily absorbed, does not produce headache, constipation, or gastric irritation, in striking contrast to other preparations of iron. The therapeutic importance of ferratin is based on the fact that it is absorbed and stored up in the liver where it is available for immediate use, while other preparations, after a slow and difficult absorption, must undergo a change into ferratin before they are active agents for the supply of the organism with the amount of natural iron necessary to its growth and nutrition. Germain Sée has administered ferratin in a number of cases and finds that it increases the nutrition of the tissues without causing any gastric disturbances, even after prolonged administration. He observed that it acted as a mild astringent without constipating the bowels, and increased the appetite. He found it indicated in anemia, chlorosis, and in all conditions of malnutrition where there was a diminution of red blood corpuscles. Dr. Samuel Wolfe, of Philadelphia, reports a case in the *New York Medical Journal* of a woman thirty-seven years old who was suffering from aneurismal dilatation of right carotid, who after an abortion and speedy convalescence, again became pregnant and went to full term without any specially untoward symptoms. In the second week after delivery she began to show decided signs of anemia. She was given the ordinary preparations of iron for several weeks, but gained very little, and the breast milk was lessening so much that she was on the point of substituting artificial food. After the use of ferratin, one gramme daily, the improvement was decided. In five days the anemia disappeared and the milk returned. The patient recovered after the use of ferratin four weeks.

The writer's experience with ferratin is rather favorable and perfectly coincides with the above reports. It was tried in doses of seven and one-half grains three times a day, on a chlorotic, anemic girl, who suffered with headache and dysmenorrhea, and showed decided anemia. After two weeks' administration her appetite improved, her headache has disappeared, and the color has returned to her lips and cheeks, showing marked improvement in the number and quality of the red blood corpuscles. She has also gained in weight.

Another case of a young man suffering from chronic malarial poisoning with its concomitant symptoms, pallor and anemic skin, pains in the back and extremities, headache, dizziness on exertion, was given ferratin in above doses with very decided improvement in all of his disagreeable symptoms after two weeks' adminstration of this agent. Other cases might be reported and other authorities referred to, but I think the above sufficient to demonstrate to any unprejudiced mind the availability of ferratin as a remedial measure, and thus secure for it a conspicuous place in the therapeutics of to-day. It has been tested by authorities of national reputation, and they have given it their unqualified indorsement as a scientific agent capable of increasing the red blood corpuscles and hemoglobin, and improving appetite and body weight.

Lactophenin.—As there is such a prolific production at the present day of antipyretics and analgesics of the coal-tar variety the physician is often at a loss to know which one will best meet the indications required in each particular case. It is in behalf of a drug which I consider worthy their consideration and trial that I offer these few remarks. Lactophenin is a white crystalline powder soluble in water and practically tasteless, doses four to eight grains, may be administered in capsules or powder. I have found that lactophenin, in above doses, reduces abnormally high temperature without any of the undesirable symptoms which follow the administration of antipyrine and acetanilid, namely, marked depression of the circulation and respiration with cyanosis. Lactophenin not only reduces temperature, but it relieves more promptly and efficiently the pain, and other nervous symptoms, which accompany fever, to a greater extent than I have been able to secure by the administration of any of the other drugs of this class. While I do not consider it superior to phenacetine as a pure antipyretic, yet for the relief of those symptoms which so often accompany a fever of any kind, such as headache and delirium, pains in the back and extremities, I think lactophenin deserves first place. I have tried it in congestive headache and found that it gave prompt relief and produced a mild hypnosis. I think it a drug that deserves at least a fair trial at the hands of the profession.

Fitten Building.

SURGICAL HINTS.

In the *International Journal of Surgery* the following excellent hints are given: When a wound, either accidental or operative, shows signs of infection, never wait for suppuration. Immediate incision, thorough disinfection, and drainage if necessary, relieve pain, shorten the duration and prevent extension of the inflammatory process.

In draining a suppurating wound, never cork it up by packing gauze in it. The smallest strip that will reach the bottom of the cavity, very loosely applied, is the best.

Constitutional treatment is all-important in all forms of diffuse surgical inflammations.

Recurrence of carbuncles and boils suggests an examination of the urine for diabetes.

See that patients have a good night's sleep the night before an operation.

Skin grafting will not succeed upon an unhealthy surface.

Watch patients with burns of the pharynx and larynx; be ready to operate at once. Severe dyspnea may occur with appalling suddenness. If the patient is getting cold and feeble, his ability to feel pain has greatly diminished. Waste no time in anesthesia in emergency tracheotomies.—*Maryland Medical Journal.*

SOCIETY REPORTS.

ATLANTA SOCIETY OF MEDICINE.

ATLANTA, GA., November 17, 1896.

The meeting was called to order by the President, Dr. R. R. KIME.

The following members were present: Drs. Pinckney, Elkin, Kime, Sommerfield, Hancock, Hutchins, Hardon, Collins, Stephens, Divine, Stockard, Champion, Amster, Grandy, Dunbar Roy, Richardson, Gilbert, and Arch Avary.

The minutes of the previous meeting were read and approved.

DR. W. S. ELKIN made some remarks upon the treatment of sprained ankle by adhesive strips, and exhibited the method of applying them. See page 662.

DR. DUNBAR ROY read an interesting and elaborate paper upon Nasal Syphilis.

Report of the committee appointed at last meeting to consider and suggest ways and means of increasing interest in and attendance upon meetings of the Society was then called for. By way of preface to this report, Dr. AMSTER, Chairman of the ommittee, made the following remarks:

"Some weeks ago I received a notice from the Secretary of our Society, that there would be a meeting to consider certain important changes of our constitution and by-laws, to determine the advisability of dividing the Society into sections, etc., and there would also be read a very interesting paper. The Secretary, in order to bring about a large attendance at this important meeting, inserted notices in our daily papers, and I naturally anticipated seeing a good assembly of our professional brethren. There were not more than a handful of doctors present. Why, you couldn't coax the members to come to one of your deliberations if you were to tempt them to an intellectual feast of nectar and ambrosia.

"Fortunately we counted a quorum at that meeting. In the course of our deliberations this little band of humble doctors, still true to their standard, aroused by the supreme indifference of the numerous members of this Society, commenced the sowing of a seed, which in time shall sprout and bloom and bear fruit, and make this Association an important factor in medical circles of this city, this State, and the South to which it is justly entitled.

"There must be something radically rotten in Denmark, that hundreds of physicians in Atlanta cannot and will not spare the time to attend two evenings a month, in which to meet their professional brethren, to foster good will and harmony, and to contribute to science their little share.

"The diligent perusal of current medical literature and the faithful attendance at Society meetings are acknowledged to be the two most powerful factors and educators of the professional man after leaving the medical schools. Have we, in Atlanta, reached the *ne plus ultra* of knowledge and the pinnacle of wisdom? Have we, in Atlanta, nothing more to learn, nothing to teach, that we can afford to dispense with the great institution of Medical Associations?

"If the good and well-meaning portion of our fraternity, the high-minded gentlemen who habitually walk the ethical path of professional righteousness, are willing to dispense with the many benefits and pleasures that are to be derived from scientific discussions and social affiliations, it is at least their duty to unite and protect themselves from the many charlatans and quacks who have infested the city, to the detriment of the legitimate practitioner and the woe of the unsophisticated, humbug-loving public. It is the duty of the legitimate physician to cry 'Halt!' to a lot of unscrupulous men who, disguised under the cloak of respectability, commit outrageous offenses against our time-honored code, commit daily breaches, not only against ethics, but against honest principle. They demoralize public trust and confidence in our art and science, and offer their incompetent services for sale for considerations which the ordinary day laborer would scorn with contempt.

"Gentlemen, I have proof positive that there are doctors in this city who hire themselves to families, consisting of six and eight members, for the monthly consideration of one dollar, making sometimes ten to twenty visits for that paltry sum. Can a young, struggling medicus, who is willing to pursue an honorable course, work against such tremendous odds? These philanthropic doctors do not discriminate between rich and poor. They contract themselves for one dollar a month to people who are able to pay double that amount for a single visit.

"Five dollars for an obstetrical case they consider a princely remuneration. Almost daily I am offered obstetrical engagements at that sum from people who are able to pay the customary fee. They claim they can get Dr. So-and-So for five dollars a case. Only recently I saw one of these cut-rate labor cases, which Dr. Cheapjohn left bleeding for six weeks after confinement. Shall we not protect ourselves and the public from such men, who tend to lower the dignity of our profession? Shall such men participate in equal privileges with the regular practitioner? They must be made to come to terms, or be shown up in their true light. Their privileges must be restricted to such an extent that no regular physician shall contaminate himself by giving aid and assistance to them. Debar them from the rights of consultation, and force them to do right from necessity if they fail to do it from instinct.

"Another point to be considered is the regulating of fees for life insurance examinations. Why do great life insurance companies, doing business of many millions of dollars every year, cut the fees of the medical examiner, upon whose integrity and efficiency their very life, prosperity and existence depends? Because of the many Cheapjohn doctors.

"To enlarge upon the gross misconduct of some members of the profession against each other, in their daily intercourse, would be entirely superfluous. We all know they are of frequent occurrence. We all know what methods some resort to for personal gain.

"I do not hesitate to say that the older and wiser members of the profession are largely responsible that such little interest is taken in the affairs of this Association and its scientific deliberations. Largely to them is due the lack of legislation to regulate the practice of medicine in this city and to enforce strict adherence to the universally adopted code of ethics. The young doctor naturally emulates the example of his older brother, the junior is willing to be instructed by his senior.

"Have you ever thought of it, you older members, why so many patients leave this city for Northern hospitals and institutions and to consult Northern doctors? If you older practitioners and teachers and proprietors of sanitariums would come to well-attended meetings of the Association, air your knowledge, and listen to the remarks of the younger members, impress them with the idea of your capability, the young doctors would not allow their sick to rush North, and let a class of patients—which we should mostly strive to retain—fill the coffers of Northern celebrities.

"Gentlemen, I can cite an instance, and three well-known surgeons will bear me out in my statement, that a gentleman of some means would not trust his little girl to have a glandular abscess opened. He wanted to take her to Baltimore, and it took four doctors to convince him that it could be done in Atlanta. The very same gentleman took his wife North, spending a large sum for an operation which could have been done here as well.

"I have as yet to see a case that left the city that could not have been as well attended here.

"Where is there a better opportunity for mutual understanding, and to know one another more intimately, socially and professionally, than the meeting of our Medical Society? Atlanta, the queen city of the South, where every branch of industry and commerce and science is forging to the front, cannot rise above the level of mediocrity in medicine and surgery. Why is it that men of the South—and she has furnished some of the most brilliant and shining lights—have to go North to gain recognition and fame? Is Southern soil not fertile enough to foster medical scientists? Are we simply 'visitors' of the sick? Cannot we also gain laurels in our art?

"It is indeed sad to contemplate when we compare our negligence with the activity of the North and foreign lands. How their medical societies flourish; how they vie with each other to discover new truths, and make new conquests in their chosen field, and we in Atlanta, cannot even support one medical society, and stimulate thought and knowledge to the best of our ability.

"I really do wonder why our local society of medicine is such a poor, forsaken institution?

"Some say there are too many cliques, that the members of the faculties of the different medical colleges are too antagonistic. Some say they are too busy lecturing and practicing medicine. Some love their home comforts too much after the day's labor is done. Some, I am told, are so liberally blest in this world's goods, that they do not care to inconvenience themselves any more. Some, they say, consider themselves so wise and perfect that there is nothing to be profited by attending the medical society meetings. Some believe there is not enough attraction. No library, no journals, etc. Some younger members do not attend meetings because the older members do not participate, and do not care to meet always the same monotonous few. Some are not satisfied with the present meeting place, etc.

"My opinion is that all these accusations are mere slander. That the medical fraternity of Atlanta, from some inexplicable cause, has fallen into a state of prolonged apathy—to use a celebrated phrase, it has fallen into a state of 'innocuous desuetude.' I say that the inactivity of the members is simply slumbering, and it is only necessary to sound the bugle, and all will awaken to their sense of duty, and will fall into line.

"It only remains for me to urge the members of the society and the profession at large to give aid and assistance and to co-operate with the committee appointed to provide ways and means whereby it will be possible to stimulate the usefulness and to reform and rejuvenate the Atlanta Society of Medicine.

"If necessary, compulsory membership and compulsory attendance at meetings ought to be adopted. Conscientious censors ought to be elected who will rigidly enforce strict adherence to ethics, etc. What at first will seem compulsion, will eventually become a pleasure and recreation to each and all of us.

"If my remarks appear unkind and exaggerated to you, I beg indulgence. My only aim is to see this society in a flourishing condition, and I hope to see the day, when it will be considered an honor to be a member of the Atlanta Society of Medicine, and that we will soon be able to point with just pride to the work we are capable of accomplishing."

The following report of the committee was then submitted:

MR. PRESIDENT: The committee appointed to recommend ways and means to revive interest in affairs of the Atlanta Society of Medicine, beg leave to make the following report:

After mature and earnest consideration, we think it feasible and practicable to amend our constitution and by-laws in the following manner:

First. No member of this Society shall consult or recognize as a regular practitioner of medicine any physician who shall have become a resident practitioner for six months, and shall have failed to become a member of this Society, or whose membership shall have ceased from any cause.

Second. Any active member who, for three consecutive months, shall fail to attend the regular meetings without a good and sufficient reason (to be determined by the Society), shall be dropped from the roll.

Third. The Society shall elect a committee of three to act as a Board of Censors, whose duties shall be to take cognizance of overt breaches of the code of ethics; shall receive notices from the members of the Society of such breaches under seal of confidence; shall call attention of members charged with the offense to the fact of such charges, and if satisfactory settlement is not agreed upon by the Board of Censors and the accused, then the whole matter is to be referred to the Society for final adjustment. It shall also be the duty of the Board of Censors to locate and prosecute offenders against existing State laws. The Society shall have the power to remove any member of the Board of Censors who shall be found negligent in the performance of his duties.

Fourth. The Society shall have the power to discipline its members for immoral or unprofessional conduct, by reprimand and suspension, or expulsion from membership; to regulate the fee bills, and to decide all questions of ethics that may arise among its members.

We further recommend the early adoption of a fee bill, the distribution of printed copies of the fee bill among the members, who shall post the same in a conspicuous place in their offices.

We also urge upon the Society to provide headquarters and a meeting place, to be paid for from the funds of the Association; also to devise means for the establishment of a library.

Respectfully submitted.

L. AMSTER,
M. B. HUTCHINS,
W. L. CHAMPION,
R. R. KIME,
F. W. MCRAE.

TRI-STATE MEDICAL SOCIETY OF ALABAMA, GEORGIA AND TENNESSEE.

EIGHTH ANNUAL MEETING, HELD IN CHATTANOOGA, OCTOBER 13, 14 AND 15, 1896.

The president, Dr. J. B. Murfree, called the meeting to order, and the first paper read was by Dr. Y. L. Abernathy entitled: "Convulsions in Children Treated with Large Doses of Morphine." He cited several cases which were about to die, recovered under large doses of morphine.

Dr. Andrew Boyd had used large doses of morphine in cholera infantum as a dernier resort. In colvulsions and cholera infantum the cause seems to be entirely reflex and the treatment seems to be correct and rational no matter how heroic it may seem. He related a case where an infant six months old took 70 drops tr. opii in two and a half hours and four quarter-grain injections of morphine in six hours.

Dr. W. G. Bogart said that he understood that this was not the only treatment the doctor gave, but this with other treatment. He would give an active cathartic, a hot bath, a copious injection of hot water per rectum, and morphia, if the convulsions still continued, in doses large enough to control the convulsions.

Dr. D. S. Middleton read a paper on "Cystitis: Report of Cases," being a statistical report showing its frequency in women, a discussion of the pathology, cause (microdic infection), the treatment by antiseptic injections and report of cases.

Dr. G. A. Baxter would add only one remedy, a saturated solution of acetate of aluminum. Nitrate of silver sometimes produces tenesmus, and he no longer uses it.

Dr. R. R. Kime read: "Some Obstetrical Complications, with Report of Cases." (See November issue.)

Dr. W. G. Bogart indorsed most heartily the position taken by the writer. He said, "the first case was one we often meet with and we fail to appreciate the importance of a thorough drainage and antiseptic. The removal of all the foreign matter and a thorough washing out of the uterus with a hot antiseptic fluid and free drainage will generally result in recovery. Case 2 is one of rare occurrence—hemorrhage eight days after delivery. I desire to call attention to the manner in which the hemorrhage was controlled—packing with iodoform gauze and keeping it so until the hemorrhage ceased. The gauze also acted as a drain for the light fluid. I shall add that I would flush out the cavity with hot antiseptic solution. Case 3 is one of great danger, which demands knowledge, skill and immediate action. I heartily commend the doctor for his action, especially his manner of controlling the fever by antiseptics rather than antipyretics, followed by free drainage. I agree that tubular drainage is the only method of accomplishing the desired result and will almost invariably bring down the temperature. I condemn the use antipyretics, especially the coal tar derivatives. Cleanliness, drainage, alcoholic stimulants and quinine, I believe to be the rational treatment of these cases."

Dr. W. C. Bilbro reported "A Case of Bradycardia" from ptomaine poisoning. The history was one of indigestion. The pulse was 30 standing after walking two blocks, and was down to 18 at times. There were times when the pulse was 6, but regular. He laid stress on the apex beat. Improvement under arsenic, strychnia, etc. He divided bradycardia into two classes, physiological, as a constitutional peculiarity, and in the puerperal state; and pathological, as from exhaustion and in stomach affections.

Dr. J. R. Rathmell read a paper on "Scarlatina" and laid stress on the complications which are the cause of death and to which treatment should be directed. The contagion resides in the epidermal scales thrown off during desquamation, hence the necessity of isolation, especially during desquamation; also the need of a vigorous effort to destroy the almost imperishable germs hidden in the room, by fumigation, by boiling and even by burning all articles of clothing, bedding, etc., used during the attack, and a thorough renovation of walls and woodwork with kalsomining and paint in order to prevent a possible attack in future.

Dr. G. A. Baxter described "A New Splint for Fractures of the Humerus below the Surgical Neck," and demonstrated the same on a subject. It consists of a blunt wedge of tin for the axillary space to which is attached a right angle splint for the arm which is adjustible on humeral portion, allowing extension to be made and fixation before bandaging. The axilla is made the point of counter extension, extension from elbow. It allows examination in case of compound fractures without disturbing extension.

Dr. Baxter said that statistics showed as much as 33 per cent. of these fractures were ununited, and this splint was invented to meet the indications as found in his own cases. Fixation cannot be from shoulder, it must be from a fixed point. There will be no complaint from numbness of the fingers or pressure in the axilla. Any tinner can make the splint.

Dr. C. R. Achison read a paper: "Treatment of Cancer of the Skin," advocating the use of caustics in the treatment of epithelioma. There is much less destruction of tissue than with the knife. In the use of the latter if there are any cells left there will be a recurrence, while if the caustic is used the inflammation, etc., will cause the death of the pathologic cells beyond the point cauterized. The pain can be reduced to a minimum by mixing with cocaine or general anesthesia. Arsenious acid has a selective action, devitalizing the cancer cells. Caustic potash is specially useful on the lip. Chloride of zinc produces a dry slough.

Dr. W. Frank Glenn read a paper: "Diseases of the Veru Montanum (Caput Gallinaginis)." He described acute and chronic inflammation, hypertrophy, hyperesthesia, cause gonorrhea and masturbation, hyperesthesia especially due to masturbation. Symptoms: Frequent desire to urinate with dribbling at end of act.

Chronic inflammation most frequent cause of impotence. Internally he recommended alkalithia or maizi-lithium--locally argonin. Nitrate of silver should be avoided in acute cases. Recovery is slow. General tonics, galvanism, etc., will generally cure hypertrophies. In hyperesthesia there is premature ejaculation in the sexual act. The mistake here is that the case is often treated for sexual weakness with strychnia, phosphorus, etc., while the opposite course is indicated.

Dr. W. D. Haggard, Jr., read a paper on "Vaginal Hysterectomy for Bilateral Suppurative Processes of the Uterine Adnexa." He said that the reason for removing the uterus where the adnexa were hopelessly diseased, requiring removal, is founded on the following facts: A large number of cases where the tubes and ovaries were removed were not perfectly cured; the persistent symptom was pain; hysterectomy cured these cases. There were painful malpositions, a more stormy and protracted menopause. There was danger of adhesions to hollow viscera and subsequent obstruction; it takes no longer to do a total hysterectomy than curetting or ventro-fixation after double ovariotomy; the mortality is lower; the uterus is a part of the disease in pyogenic infection, hence hysterectomy was not the removal of a healthy, intact organ. The mortality in five hospitals was 18.5 per cent. in removal for tubes and ovaries alone for pus. Vaginal hysterectomy in 724 cases, 4.6 per cent.; Jacob's 403 cases, 2.9 per cent. The supreme triumph of the vaginal operation was that it afforded the means of a thorough exploration essential to conservative proceedure. The vaginal method preferable because: 1. The preliminary step, vaginal section, allows thorough exploration and conservative treatment, with a minimum of risk. 2. The vagina is the natural approach and logical avenue for drainage of the pelvis. 3. It is immune from the unpleasant sequelæ of laparotomy, possibility of hernia, stitch abscess, infected ligature and sinus, and the abdominal supporter. 4. Less immediate shock. Convalescence is smoother and shorter. 5. No exposure or handling of intestines. 6. Less danger of peritoneal contamination. 7. Mortality is lower. 8. Invades only the diseased area and leaves undisturbed the protecting mass of adhesions. The steps may be summarized as follows, but may be varied: 1. Preliminary curettage. 2. Completion of incision around cervix, prolonged transversely in the lateral fornices. 4. Freeing cervix anteriorly from the bladder and ureters. 5. Application of clamps to base of broad ligaments containing the uterine arteries. 6. Amputation of cervix. 7. Median section of the uterus. 8. Enucleation of each appendage separately. 9. Application of clamps to upper portion of broad ligaments containing ovarian arteries. 10. Excision of each lateral half of uterus with diseased mass."

Dr. W. E. B. Davis, read a paper on "Treatment of Pus in the Pelvis." He said that some of the French surgeons report inability to remove appendage in many cases per vaginam, but that the cases got well, demonstrating that drainage cures. This is the essential thing. Not necessary to remove uterus. High amputation of cervix, drain tubes, and curette uterus later. All cases will not be cured, but an abdominal section can be done later. In removing tubes it is better to go in from above as they are difficult to remove per vaginum.

Dr. J. A. Goggans opened the discussion on these two papers by saying that he followed the practice of Dr. Davis. He thought that we should be very conservative and seriously consider harmful sequelæ of complete ablation of genital organs in young women. Every appropriate treatment was justifiable when we consider the great variety of pathological conditions. He recognized three methods of treating pus in the pelvis: 1. Simple incision with drainage through vagina or abdomen. 2. Opening abscess by laparotomy. 3. Opening abscess per vaginam. Each applicable to suitable cases. He related a case of laparotomy drained finally through the vagina, followed by irrigations, recovery; also one of large pelvic abscess which ruptured during examination. An immediate laparotomy saved the patient.

Dr. W. F. Westmoreland read a paper: "Some Remarks on Syphilis," taking the ground that it was often communicated by means other than sexual intercourse: sixty cases infected from a catheter; a dozen children from vaccine point. Danger from doctors, from servants. Hereditary syphilis is quite common.

Dr. Westmoreland thought that we could do much to check syphilis. At his clinic there were many servants treated. Where there were lesions on the hands they were directed to quit work, and generally did so. He saw many cases where infection was not due to venery. In New York nine cases were reported of doctors who had the primary sore on the fingers. He would prevent the marriage of an innocent girl to a syphilitic; if necessary would inform the family of the girl, after telling the patient of his intention.

President J. B. Murfree delivered his annual address, "The Doctor of Medicine." He congratulated the society on its prosperity and urged greater efforts for its advancement. He advocated higher and more unselfish motives in the practice of medicine. He deprecated young men entering the profession simply to make money. Medicine is a poor trade for an honest man, and if money is the only object there are others that pay better. The doctor's first duty is to his patient, to give him his best services. He should be ethical, not allowing the love of gain or distinction to swerve him from the right. The reputation of a brother physician should be defended. He dwelt upon our duty to the public in regard to preventative medicine, and how to avoid quacks and patent medicines.

Dr. J. A. Goggans read a paper entitled: "A Few Unique Cases in Abdominal Surgery." He thought that surgeons should report their cases, especially the unsuccessful ones, that the science and art of surgery might be of greatest utility to humanity. He presented a specimen of ovaries that contained serous and myomatous multiple follicular cysts, removed from a woman 55 years old. Related a case of abdominal section for tubercular peritonitis. The patient had been an invalid seven months, temperature 101, pulse 110. More than one-half gallon of ascitic fluid was evacuated, abdominal cavity irrigated with normal salt solution. Patient made a good recovery from incision, and was able to work most of the time. The third case was that of a child. He presented a stomach and intestines removed *post mortem* with their mesentery. Diagnosis was impossible without exploratory incision. The fourth case was that of right hemiplegia following an exploratory incision in a female 60 years old. The patient was recovering from the paralysis. The fifth was the only case that has ever recovered after operation, in America, and perhaps the only case where operation has been undertaken for exactly that condition in this country. The patient had been out of health for two years, but her abdominal pains and enlargement had existed only eight or ten months. She had been treated for abdominal dropsy. On opening the abdomen the tumor proved to be one of the mesentery. He stitched and drained, and the patient recovered. The other successful cases were one operated on by Bantock, in London, and one by Pean, in Paris.

Dr. Catherine R. Collins read a paper entitled: "Microscopical and Chemical Aids to Diagnosis," dwelling on the importance of examinations of the urine. It should be examined for five days in succession. The whole amount passed in twenty-four hours saved. That in the morning gives the urine of a fasting patient. She related cases illustrating her position. She then called attention to the use of the microscope in diagnosing many diseases, especially tuberculosis, 'diphtheria and malaria, and also the changing views in regard to the origin of typhoid fever. The Eberth germ, according to Vaughan, not being the cause, but an involution form of one of several germs that may, separately or collectively, be the cause of the disease.

Dr. R. H. Hayes read: "A Statistical Report of the More Recent Remedies Used in the Treatment of Tuberculosis, and Summary of Recent Preventative Methods of Value," in which he gave an array of clinical and bacteriological statistics from such men as Koch, Maragliano, Campana, Kleis, Hunter and others in Europe, von Ruck, Taylor, Dennison and Vaughn, and others; also a report from a committee from the New Orleans Parish Medical Society in favor of the newer or biological, or directly germicidal remedies, originated by Koch, as tuberculin, tuberculocidin, antiphthisin; also the nuclein preparations of Vaughan, and such medicines as pilocarpin and aseptolin. These statistics, he claimed, were good evidence in favor of the remedies, as they were clinical, and were from men prepared to apply them properly, carefully, and who had taken the proper time. The use of these newer remedial agents in tuberculosis had reduced the general mortality rate perceptibly. He also gave an outline of the work of the New York Board of Health to restrict tuberculosis. This consisted in public and private instruction as to danger from milk and meat (bovine tuberculosis), and from dried sputum (human tuberculosis), it having been conceded that from these sources the large majority of cases were contracted. By thorough system of instruction the board had gotten better results in preventing spread of disease and had succeeded in largely reducing mortality rate from tuberculosis, and had demonstrated beyond doubt that it was contagious, infectious and preventable.

Dr. Y. L. Abernathy thought that there was nothing in serotherapy. The remedy was made to sell. Koch's tuberculin was a failure, but millions were made out of it before it was found out. Pasteur's hydrophobia and tetanus cures, Hammond's serums, Brown-Sequard's elixir of life, all on a par. They get up wonderful statistics. Something may be developed along these lines as good as vaccination, but it is still in the future. At present they are only fads, and very expensive and silly fads.

Dr. Geo. S. Brown said that we had the two extremes in the reader and the last speaker. Koch had done more than any other man to reduce the mortality from consumption, not from serum therapy, but because the disease was better understood. The principle has not been discovered that will cure consumption. Some who make great claims do not have the confidence of bacteriologists. When the true principle is discovered it will not require any great amount of advertising. The man may have his laboratory in Sahara desert, but will do a good business. In diphtheria the true principle has been found, and antitoxine is a success. The serum treatment offers much in the future.

The following officers were elected for the ensuing year:

President—Willis F. Westmoreland, Atlanta, Ga.

Vice-Presidents—M. B. Hutchins, Atlanta, Ga.; Seale Harris, Union Springs, Ala.; C. R. Achison, Nashville, Tenn.

Secretary—Frank Trester Smith, Chattanooga, Tenn.

Treasurer—Geo. R. West, Chattanooga, Tenn.

Chairman Committee of Arrangements—W. D. Haggard, Jr., Nashville, Tenn.

Adjourned to meet in Nashville on the second Tuesday in October, 1897.

CORRESPONDENCE.

THE BOARD OF EXAMINERS AND THE ATLANTA CLINIC.

GRIFFIN, GA., October 27, 1896.

To the Editor of the Atlanta Medical and Surgical Journal:

My attention has just been called to a very caustic and unjust criticism of the Board of Medical Examiners of Georgia, published as an editorial in the October number of the *Atlanta Clinic.* Please allow me space in your columns to reply to the same.

I suppose the public acts of all public officers are liable to be criticised, and self-appointed critics, like the poor, we have with us always. This spirit of censoriousness nearly always has its origin in ill-nature, and as Lady Blessington says, "They consider the severity of their censures on the supposed failings of others as an atonement for their own." There are two things which frequently neutralize the sting of a criticism; the obscurity of the source and the injustice of the criticism.

The board is called to task by the writer of the article, and is accused of being derelict of its duty in that it does not prosecute quacks and rid the State of their presence. This same writer says, "The law is very plain." Yes, indeed, it is plain, but not plain enough it seems for this brilliant writer to understand it. The end of the law under which the board was created was to protect the people against irresponsible and incompetent practitioners of medicine by requiring that no one be allowed to practice medicine (since 1895—the law is not retroactive) without having passed a satisfactory examination before the board. The function of the board, then, is to examine eligible applicants and to pass on the competency of those examined to become practicing physicians. There its function ceases. The object of the board, then, is not to prosecute quacks, nor usurp the functions of the courts. Nor, indeed, is it to determine whether those who pass shall henceforth conform to professional ethics, nor does it guarantee that every one who passes shall become an efficient physician. What the board has to do is to determine whether applicants have requisite knoweledge—only this. Its function, then, is constructive immediately, destructive remotely. It must destroy gradually the evils of ignorance which have cursed the profession, by seeing that no man enters it whose knowledge is not sufficient to qualify him to practice. The board is in a measure responsible for the knowledge of those who pass, but by no means for their ability to apply what they know. Our critic can find no sensible lawyer in this State who will construe the law in such a way as to make it the duty of the board to prosecute any violators of the law. The law does make provision for the punishment of its violators, but no such thing as making the board a board of prosecuting officers is contemplated by the law. "The law upon the subject is plain, your duty is a plain one," says our critic. Our duty *is* a plain one. That duty is simply for the board to meet twice yearly and examine such applicants for license to practice medicine as are eligible for examination, and pass upon their qualifications. If the board should see fit to meet oftener it may do so. We had five sessions last year. At every meeting, I am sure each member conscientiously performed his duty as he understood it. And we have given an account of our stewardship to the proper person. An official statement of the work done by the board is in the hands of the Governor.

While it is not the legal duty of the board to prosecute quacks or violators of this law, we admit that there is a moral obligation resting upon us as physicians and as good citizens to do what we can to bring offenders against this law to punishment. But this moral obligation is no more binding upon us than it is upon any other reputable physician or good citizen of this State. It is the duty of all good citizens, of all reputable physicians especially, to report to the proper authorities those who practice medicine without the proper legal qualifications. In view of the fact that we felt this moral obligation resting upon us, we have done a great deal of work in excess of our legal duties. The secretary of the board has written to every superior court judge in the State asking them to particularly charge the grand juries in regard to this new law, and to request every solicitor-general to bring every offender against this law to justice. The secretary has given a great deal of time and labor to the work of getting up a list of the physicians in the State, with their postoffice address, the year in which they registered with the county clerks in accordance with the old law regulating the practice before the enactment of the new law. This was a tedious and laborious piece of work we imposed upon our secretary, but we considered it necessary before taking other steps contemplated, by which we hope to help our professional brethren to weed out the pretenders and quacks in the profession in this State. All of this and other work looking to the good of our profession has been done by the board without the hope of reward or fear of punishment.

In conclusion, will say we have asked no advice of the editor of the *Clinic*—perhaps we should have done so—but as an excuse for not doing so, will quote from Gœthe, "He who asks advice shows himself limited; he who gives it, gives also proof that he is presumptuous."

It is said that the goojerat or maneless lion of South Africa has a claw in his tail with which he lashes himself into a fury before attacking his prey. Now we will ask of our critic that when he sees a quack walking the streets of Atlanta, not to lash himself into a bad humor with the tail and claw of malice and attack this "board of figure heads," but go ahead and get up evidence against the offender, present him to the grand jury, get a true bill against him, then turn him over to Austin & Park, our attorneys, who have prosecuted offenders for us before. Then, we promise that we will not "hold up our hands in holy horror because there is no appropriation from the State" to pay Austin & Park, but we will pay them from our own pocket-books, as we have done heretofore.

E. R. ANTHONY, M.D.,
President of Board of Medical Examiners.

MY FIRST CASE OF PUERPERAL CONVULSIONS.

ROANE COLLEGE, TENN., October 22, 1896.

On the night of October 6, 1896, I was called to see a young lady in her first confinement. On arriving at the bedside of the patient, I made inquiry as to her general health during her term of pregnancy. She informed me that her health had been very bad—bowels acted every two weeks, urine scanty, appetite poor, tongue coated brown and dry. I noticed that her hands and face were swollen considerably. On further inquiry I learned that for two months previous to her confinement she was unable to rest any at night, could not assume a recumbent position at all, complained of shortness of breath, lower extremities swollen so much she could not wear shoes. Two weeks before confinement there was rupture of right leg with a flow of liquid from opening. Eighteen months prior to confinement she had a slight stroke of paralysis of the left side with a recurrence in February last of same side. She said she was eight months pregnant.

I then endeavored, by abdominal palpation, to make out the position of the fetus, and if there was more than one, but gained nothing of importance. After thoroughly cleansing my hands, I made a digital examination per vaginam. Vertex presentation, pelvis roomy, right labia majoria swollen considerably, labor progressed nicely. Once I noticed, after a very hard pain, a rigor seemed to pass over body, yawned once, mouth slightly drawn to one side. I charged my hypodermic syringe with eight mins. tincture veratrum viride (Norwood's) in case of an emergency, gave fifteen grains each chloral hyd. and sodium bromide, used chloroform during height of pains. In a very short while she gave birth to a very small female child with single hair lip and cleft palate. In exactly twenty minutes from birth of first infant she was delivered of a second well developed child. Uterus contracted nicely, placentas and membranes came away naturally.

In three hours from birth of last child left patient to return at 4 o'clock P. M. Delivery was at 5 o'clock A. M., October 7th. Prescribed a diuretic and laxative before leaving, returned at 4 P. M., found patient doing well, taking nourishment, pulse 74 per minute, temperature normal; put on binder and left patient comfortable. At 5 o'clock P. M. she asked her husband to assist her to turn on her side. It was then she had her first convulsion, twelve hours from birth of babies. I was then five miles away. When I reached my patient the second convulsion had come on. I immediately gave her 8 mins. veratrum viride hypodermatically, repeating in twenty minutes. As soon as convulsion passed off I gave 15 grs. each chloral hyd. and bromide potass. She then commenced vomiting and continued to vomit until the last convulsion, which was nine in all. I gave an enema of chloral, while I endeavored to control the vomiting. Called another physician; did not change treatment; used chloroform by inhalation; also amyl. nitrate.

We decided not to bleed, as she was very anemic. The consulting physician gave up all hope and left. The mother of the patient asked permission to call in her family doctor. The first thing he suggested was venesection. I begged to be excused under the circumstances. He and her mother insisted, as bleeding had saved her life when she had had puerperal convulsions. So they bled in both arms, and succeeded in getting about three ounces of very black blood, which coagulated readily. Up to the time of bleeding she had had seven convulsions, each one more severe than the preceding one. I then gave her hypodermatically 4 mins. flu. ext. gelseminum, ¼ gr. morph. sulph.; had one more convulsion, gave gelseminum 6 min., ¼ gr. morph. sulph. internally; one more convulsion, the last one she had; slept four or five hours. Last convulsion 8th October. On the 9th swelling had left face and limbs to some extent, but seemed to be accumulating in abdomen, interfering with breathing a little. There was a very troublesome cough with rusty expectoration on the 10th. Breathing very difficult, had to sit propped up in bed, lips blue. I had been administering mild cathartics and diuretics all along. Discharges natural, sufficient pulse, ranging from 100 to 104 per minute, feeble, temperature 100° F. to 102° F. Case became alarming evening of the 10th inst. I called two able physicians with the idea of resorting to surgical means to get rid of abdominal accumulations, but declined until a future day, owing to feeble circulation. Prescribed cathartics, causing watery evacuations, and as severe as the case would admit. Diuretics and diaphoretics were given with excellent results. Patient did extra well; sat up on tenth day after delivery for the arrangement of bedding and toilet; also on the eleventh day. In the evening of the eleventh day temperature 104° F., pulse 108 to 112, full and strong; called for water; on attempting to drink, her tongue became stiff, uttered three or four violent screams, fell back in an unconscious condition, from which she never rallied, dying on the 14th day after confinement, face flushed, pupils dilated, pulse from 108 to 112, full and strong, temperature ranging from 102° F. to 104° F.

I think it unnecessary to give full line of treatment that was followed. I will say that I gave ammonia carbonate in five-grain doses hourly, with the idea of preventing, as much as possible, embolism or trombosis.

This is to me a very interesting case, and one, I am sure, which will never be erased from my mind.

JOHN B. CROSS, M.D.

GLYCERIN IN CERTAIN AFFECTIONS OF THE STOMACH.

In a recent article, Sir James Sawyer remarks that some years ago Dr. Sydney Ringer recommended the administration of glycerin by the mouth in certain affections of the stomach. Acting upon his suggestion, he has since treated many cases of painful gastric digestion, such as are usually attributed to subacute or chronic catarrh of the gastric mucous membrane, with glycerin with satisfactory results. So far as he has seen, this employment of glycerin is not widely extended in professional practice, and he has not noticed further reference to it in the periodicals. The familiar routine seems to be a ringing of changes upon bismuth, alkalies, acids, and digestives. Many cases of gastric maladies of the kind indicated yield to glycerin; he gives a drachm, a drachm and a half, and sometimes even two drachms, with a little of some simple bitter stomachic tincture, diluted to an ounce with water, thrice daily, between meals.—*New York Medical Journal.*

EDITORIAL.

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IF A SUBSCRIBER NOTIFIES US TO STOP HIS JOURNAL AND IT IS NOT DONE, OR, IF HE ORDERS HIS ADDRESS CHANGED AND IT IS NOT, HE MAY KNOW THAT WE DID NOT GET HIS ORDER. MOVING TO ANOTHER ADDRESS WITHOUT NOTIFYING US, DOES NOT EXCUSE HIM FROM PAYING HIS BILL.

THE SEMI-CENTENNIAL OF THE DISCOVERY OF ANESTHESIA.

We give space this month to a report of the late celebration at the Massachusetts General Hospital of the semi-centenial of the discovery of anesthesia. In this connection, also, we are glad to be able to be able to publish the excellent article by Dr. Roswell Park on the history and introduction of anesthesia. The nature of this article justifies us in calling particular attention to it. It was evidently written from a desire to be absolutely fair to all the parties to the ether controversy. He does not advocate anybody's claim—there is no necessity for that any longer—he has reviewed and presented the essential history of the use and introduction of ether as an anesthetic, and his statement of these circumstances is by far the best that we have ever seen. With the history of the introduction of anesthesia it is every medical man's duty to be familiar. We especially commend the paper of Dr. Park as worthy of careful reading.

A MEDICAL DEGREE FOR THIRTY-FIVE DOLLARS.

The following lithographed letter is being sent broadcast to physicians who do not appear as graduates in medicine in Polk's Medical Directory:

FRED. RUTLAND, M.D., Pres't. A. NEVE RUTLAND, M.D., Sec'y.
CHAS. PODMORE, M.D., Treas.
Incorporated under the laws of the State of Wisconsin.
WISCONSIN ECLECTIC MEDICAL COLLEGE,
OF MILWAUKEE, WIS.
CORRESPONDENCE DEPARTMENT,
1001 W. Congress St.

CHICAGO, ILL., November, 1896.

DEAR DOCTOR:—We notice your name in a Medical and Surgical Directory, but with a * appended. This usually means (although not necessarily so) that the person so designated is not a graduate of a Medical School, and has no diploma. If, however, it should be that you are a graduate, and have a regular diploma, then we can but tender our most sincere apologies for troubling you on the matter. But, on the other hand, if you are not a graduate, and have no regular diploma, then the perusal of the enclosed prospectus cannot fail to be of the most primary importance and interest to you. We would also desire to draw attention to the fact that to Practising Physicians our fees are much reduced from the regular rates. To this class our fees are $35.00, all inclusive.

As proof of our legal standing and right to confer the degree of M.D., we can supply *Certified* copies of our charter at 25 cents each, simply covering the cost of certifying-officer's fee.

Trusting soon to hear from you, and standing ready to answer any or all questions you may wish to submit, we are yours very sincerely,

WISCONSIN ECLECTIC MEDICAL COLLEGE,
FRED. RUTLAND, PH.D., M.D.

A similar letter is sent to druggists who "have aspirations to a profession which runs side by side with that of pharmacy, if they desire to become physicians and have the legal right to append M.D. to their names." "Why," these letters ask, "should not the pharmacist avail himself of the opportunity (while he has it) to take another step on the ladder of life and become an M.D?" Persons are further assured that the "diplomas of the Wisconsin Eclectic Medical College are perfectly good in law, binding and valid."

We publish this business, of course, only to condemn it, and to assist in putting medical boards on notice for these "hand-me-down" diplomas. The existence of such an institution is a disgrace to the State of Wisconsin, which should take prompt action in having this charter annulled. It may be mentioned that the president and secretary of this Correspondence "College" are man and wife, respectively. Look out for the diplomas of Dr. and Mrs. Rutland.

THE EXAMINING BOARD AND ITS CRITICS.

We call attention to the letter in this issue from Dr. Anthony, President of the Board of Examiners, in reply to a late criticism of the Board's performance of duty. Nothing could be clearer as to the definition of the Board's powers and duties than this statement by Dr. Anthony, unless it be the text of the law itself, which probably the self-appointed critic has never read. The Board has certainly accomplished a great deal already, and we do not doubt that it is doing all that it can within the law. Much more could be done, however, if those who volunteer their criticisms would exert their valuable energies and talents in assisting the Board and its attorneys in bringing offenders to justice.

ACCORDING to the Cincinnati *Lancet-Clinic*, the medical schools of the United States number about 175. Of these 120 are regular, 19 homeopathic, 7 eclectic, 2 physio-medical, and 12 unclassified. Eight are for women specially, five of these being regular, two homeopathic, and one eclectic. In eight of the other colleges women are permitted to matriculate, and four are exclusively for colored people.

SELECTIONS AND ABSTRACTS.

THE DISCOVERY OF ANESTHESIA.

The semi-centennial of anesthesia was observed by impressive exercises at the Massachusetts General Hospital, October 16th. A reception of the invited guests was held in the amphiteatre, in which, fifty years before, the first operation under ether was performed by Dr. J. C. Warren, the anesthetic being administered by the discoverer, Dr. W. T. G. Morton. An attempt was made to have this room present, as nearly as possible, the appearance it had half a century ago. Upon the walls were pictures of Dr. W. T. G. Morton, Dr. J. C. Warren, and other eminent physicians and surgeons of that day.

Dr. John Collins Warren, grandson of Dr. J. C. Warren, who did the first operation with ether, opened the exercises by reading a number of cablegrams showing the widespread interest in the celebration.

The chairman next introduced Dr. Robert T. Davis, of Fall River, who is one of the few surviving witnesses of the first application of ether in surgery. The operation, he said, was performed in the surgical amphitheatre of the Massachusetts General Hospital, by Dr. J. C. Warren, in the presence of a number of distinguished surgeons and physicians, among whom were Dr. Hayward, Dr. Jacob Bigelow, and his son Dr. Henry J. Bigelow. The Harvard medical class was also present. After some delay, Dr. W. T. G. Morton appeared with his apparatus, when Dr. Warren addressed the medical class, which had not been previously notified of the proposed experiment, stating, in substance, that there was a gentleman present who claimed that he had discovered that the inhalation of a certain fluid would produce insensibility to pain during surgical operations, with safety to the patient; that, as they were well aware, he had always regarded that condition as an important desideratum in surgery, and had permitted him to try the experiment. The patient was a young man who had had, since birth, a tumor under the jaw on the left side.

Dr. Warren had been applied to by Dr. Morton, a dentist, with the request that he would try the inhalation of a fluid which he said he had found to be effectual in preventing pain during operations on teeth. Dr. Warren having satisfied himself that the breathing of the fluid would be harmless, determined to use it on this patient. The apparatus consisted of a tube connected with a glass globe. This apparatus he then proceeded to apply, and after four or five minutes the patient appeared to be asleep. The operation consisted of an incision, about three inches in length, over the center of the tumor, through the skin and subcutaneous cellular tissue, and the removal of a layer of tissue. A curved needle was passed under and around the tumor and considerable compression made. To the surprise of Dr. Warren and the other gentlemen present, the patient did not shrink nor cry out, but during the insulation of the veins he began to move his limbs and to utter extraordinary expressions, and these movements seemed to indicate the existence of pain, but after he had recovered his faculties he said he had experienced none, but only the sensation like that of scraping the part with a blunt instrument, and he ever after continued to say that he did not feel any pain.

From that time forward it became the practice to employ it at the hospital in all operations of importance. Dr. Morton continued to administer it until it was proved that it could be easily and safely administered by others. The apparatus which he had used in the first and a few subsequent instances was soon abandoned as unnecessary, and attended with possible risk, and the concave sponge was substituted. Sulphuric ether as an anesthetic promptly passed into general use in Boston and throughout the State, and soon afterwards in public and private practice in the large cities of other States, followed by its employment all over the country wherever scientific surgery was practiced. Its fame crossed the ocean, and it rapidly became a necessary adjunct to surgery in Europe as well as here, and beyond, even to the utmost limits of civilization—it did not stop there, but among savage tribes and barbarous races in distant continents and islands it followed the footsteps of the explorer, the trader and the missionary on its divine errand of mercy to mankind. It is impossible to estimate or comprehend the importance of this beneficent discovery.

Dr. John Ashhurst, of Philadelphia, read a paper on "Surgery Before the Days of Anesthesia."

A study of the condition of operative surgery before the days of anesthesia revealed, on the one hand, a picture of heroic boldness and masterly self-control on the part of the surgeon, and on the other a ghastly panorama, sometimes of stoic fortitude and endurance, sometimes of abject terror and humiliation, but always of agonizing wretchedness and pain on the part of the unhapyy victim, man or woman, whose necessities required a recourse to the surgeon's aid. And from our vantage ground of half a century's experience, it was difficult for us to understand why, with the constant and persistent efforts made by surgeons in past ages to lessen the pain of operations, and with the gradual but continuous accumulation of facts, showing that by certain agents pain could be temporarily abolished without danger, the eyes of all patients as well as practitioners yet seemed to be holden; and why, science and art working with a common object, if independently, though the whole world seemed to be trembling on the verge of the discovery, it yet was not until fifty years ago to-day that the crucial experiment was made in this hospital, and that surgical anesthesia became a glorious reality.

It was not an unheard of thing for the surgeon's presence of mind to fail him in difficult operations at the present day, but at least the patient, unconscious through the blessing of anesthesia, did not know it. Celsus urged pitilessness as an element of success in operating. Sir James Simpson, of Edinborough, shortly after beginning his professional life, was so affected by seeing the agony of a woman whose breast was amputated, that he resolved to abandon the profession; but later reconsidered this, and asked: "Can nothing be done to make operations less painful?" Twenty years later he introduced chloroform. After Admiral Nelson's elbow was shattered, he underwent amputation with the same firmness and courage that always marked his character, and yet so painfully was he affected by the coldness of the operator's knife, that he gave a standing order to his officers that hot water should always be at hand, so that the unfortunate victim might at least have the poor comfort of being cut with warm instruments.

Case after case was narrated by Monfalcon in which men submitted themselves with the utmost calmness and fortitude to the hands of skillful operators instantly falling into collapse after the first incision, and without undue loss of blood quickly succumbing to the depressing effects of simple shock and pain. Opium and alcohol were the only agents that continued to be regarded as of practical value in diminishing the pain of operation, though the disadvantages of their employment were, of course, recognized. Alcohol, pushed to the point of intoxication, had been used by some surgeons; but yet surgeons went on cutting and burning, and patients went on writhing and screaming, until on the 16th day of October, 1846, in the Massachusetts General Hospital, Dr. John C. Warren painlessly removed a tumor from a man who had previously been etherized by Dr. William T. G. Morton, and surgical anesthesia became the priceless heritage of the civilized world.

Dr. David W. Cheever, Professor Emeritus of Surgery in Harvard University, presented the next paper on "What Anesthesia Has Done for Surgery."

The reader said there was no more universal instinct than to dread the knife, to shrink from an operation, to fear pain. All this had been annulled by anesthesia. The shock of the operation was largely diminished. Anticipation was done away with; pain was prevented; shock was reduced. The patient consented to operation earlier. He did not wait till life became unbearable, but calmly contemplated surgery as the natural and easy channel of relief; hence, his chances of benefit from an operation were much increased. So much was done for the patient.

To the surgeon anesthesia gave the patient a sleep, motionless, senseless. He need not hurry, he need not sympathize, he need not worry, he could calmly dissect as on a dead body; heedful only that the etherizer was competent, that the breathing and pulse were watched, that the operation was not prolonged beyond the verge of exhaustion. The surgeon, then could do better work, could be more careful, could pause and consider, could choose his steps, could be deliberate, if not dextrous. He could even summon the aid of the pathologist and his microscope, who in ten minutes, while the patient slept, could decide the nature, the innocence or malignacy of the tumor he was removing. It was not too much to say that all the finer work of plastic and abdominal surgery dated from the discovery of anesthesia. It could not have been done before; neither surgeon could persist nor patient endure. Perhaps one thousand ovariotomies were done by Sir Spencer Wells before antiseptics were much practiced, but all since anesthesia was known. Formerly the surgeon was esteemed for dexterity; now he was esteemed the great surgeon who, to judgment, adds dexterity, and to dexterity patience. Anesthesia was the necessary precursor of asepsis. Without the former the latter could not be what it now is. Even if antiseptic agents were used in dressing wounds, the operations which caused the wounds could not have been done aseptically without anesthesia. The essence of asepsis was detail, tedious rules and precautions, prolonged and accurate dressings. All this required time, immobility, unconsciousness. The surgeon could not stitch the most delicate tissues with accuracy, match the bowel or bladder, so that it would not leak, on a conscious and quivering patient. Anesthesia and asepsis must be inseparable. Visceral surgery, which dealt with great serous cavities, and which constituted the proud distinction of modern surgery, depended on anesthesia first, and on asepsis afterwards.

Dr. J. P. Reynolds, formerly Professor of Obstretrics in Harvard University, spoke of "The Relation of Anesthesia and Obstetrics."

Dr. Reynolds said that in operative obstetrics, in the high and difficult application of instruments, in the introduction of the hand for version and extraction, anesthesia produced the same admirable results as in other surgical proceedures. It brought unconsciousness to the patient and afforded the operator ample time for exact diagnosis and opportunity to work with accuracy and delicacy. Anesthesia in the induction of premature labor was of great assistance. The service of ether in puerperal convulsions was still more striking; it had no power to cure, but we gained an opportunity for treatment—the emptying of the uterus. In normal labor due anesthesia was free from every shadow of danger. The anesthetic should be allowed only during the uterine contraction, the time of positive pain. In this manner ether might be continued from the beginning of labor to its close. Whenever the attendant saw that the woman's endurance of pain began to tell upon her patience and courage the moment for ether had come. It should be kept up as long as this need lasted, no longer. In its first employment a lull often came in the uterine action, the patient sinking into a much needed sleep, to which soon succeeded a more vigorous advance. In the earliest pains some observers held that chloral in suitable doses gave better sesults.

"The Influence of Anesthesia upon Medical Science" was able discussed by Dr. W. H. Welch, of Johns Hopkins University.

The discovery of ether, the reader said, was a triumph for the experimental method. It was important to emphasize that the utility of the discovery of anesthetics was not limited to their application to surgical, medical and obstetrical art, but that this discovery had been of great service in experimental medicine. The introduction of anesthesia came at a period of awakened activity of investigation. Dr. Welch discussed, at some length, the relation of experiments upon animals to the advancement of medical knowledge. He maintained that in all exepriments upon animals insensibility to pain was first secured in all cases in which this condition would not defeat the object of the experiment.

The last paper was by Dr. Charles McBurney of New York, on "The Surgery of the Future."

Without anesthesia the best of modern work in surgery would have been impossible. Through the discovery of asepsis and anesthesia, surgery had become a gentle art. It would almost seem as if the future would hold for us no obstacles, such had been the advance in the past. In the immediate future the greatest surgical victories were to be won by bacteriology. Through it diphtheria and tetanus had been brought within the list of frequently curable diseases. Would not the discovery soon be made by which we should be able to destroy the sepsis-producing organisms, no matter how wide its distribution. Operative surgery had done much to overcome the terror of cancer. The discovery of the true nature of the disease, whether it owed its existence to a living organism, was for the future. Bacteriology was and ever would be in the hands of most brilliant men, and surgery was destined to attain many of its most brilliant triumphs through the aid of this army of valuable co-workers. Through the study of the blood we might expect in the future an exact and early diagnosis in many surgical disorders which now were appreciated in a stage too late for beneficial treatment. The operating surgeon of the future would know when to interfere and when to withhold his hand; he would know, better than we, who were actually moribund. He would not be tempted by the plea that the patient must die and should be operated on as a last resort.

He would not attempt to cure with the knife the little microcephalic child. He would have at his disposal the large experience of the surgeons of to-day. We might confidently look forward to improved diagnosis of surgical disease. The future surgeon would enjoy a much closer and more intimate relation with his brother, the physician, than had ever existed between them before, for what could be cured by surgery only would be far better appreciated by both surgeon and physician than at present. Above all, the surgery of the future would attract to its enthusiastic study and practice finer and finer men, in whose hands we might safely leave the development of our science. A single glance at the faces of the students who collected in the operating rooms would show what a change had occurred in the last twenty-five years. For this too we must ever be grateful to anesthesia, which, in removing the torture of surgery, had robbed it of what repelled many sensitive natures; and the science of asepsis, by rendering complete success in surgical work possible, would excite the most devoted enthusiasm from many scientific men, who soon would have become sick at heart over the failures of former times. Through the vast experience of the recent past, the surgeon of the future would find many of the coarser problems already solved, and those that remained would stimulate him by their difficulty. He would be an accomplished anatomist and a physiologist; he would study medicine and pathology first, and then general surgery. If he specialized his practice he would do so only after a large general experience, and he would borrow from every science all that could contribute to the perfecting of his work.

A beautiful poem, entitled "The Birth and Death of Pain," was then read by Professor S. Weir Mitchell, of Philadelphia.—*International Journal of Surgery.*

SENILE ENDOMETRITIS AND VAGINITIS.

Dr. Augustin H. Goelet, Professor of Gynecology in the New York School of Clinical Medicine, presented a paper on this subject at the October meeting of the New York Medico-Surgical Society (*Medical Record*). He thinks if the general practitioner will consider that women past the menopause may be liable to chronic inflammation of the endometrium, and will look for symptoms denoting it, he will find that it is by no means infrequent, and that many obscure troubles in women at this age will be cleared up and their suffering relieved.

The atrophic changes which occur at this time, and which are due to a diminished pelvis circulation and impaired local nutrition, are directly responsible for this condition. He agrees with Skene that this process, in many cases, is a degeneration rather than an inflammation. During the first year or two after the monopause, however, it undoubtedly exists as a chronic inflammation, but contraction and narrowing of the canal of the cervix causes retention of the secretion, which becomes acrid and destroys the mucous membrane.

The general mal-nutrition which accompanies this condition is regarded more as a result than a cause of the disease, and disappears upon the establishment of drainage and improvement of the local condition. The disease is characterized by a purulent or muco-purulent, discharge which is at times very acrid and irritates the vagina and vulva. The rugæ are effaced, and the surface of the vagina is smooth and glistening in places, with here and there minute ecchimosed papillæ.

The same method of treatment which would be applicable for endometritis in younger women would not be suitable in this condition. It is true that drainage and absolute cleanliness of the uterine cavity are essential, but this cannot be accomplished by dilatation in the usual manner with curettage. The mucous membrane in advanced cases is already destroyed, and the closure of the canal of the cervix from bands of cicatricial tissue would make ordinary dilatation dangerous, since rupture would result. The author points out that this may be accomplished safely by means of conical electrodes employed with the negative pole of the galvanic current, and cautions that only a moderate strength of current should be employed, and cauterization should be avoided. When dilation has been thus accomplished, a special, small, double current irrigator is inserted, and the cavity is washed out with a weak solution of lysol. This irrigator can be utilized as an electrode, and the current is turned on while the irrigation is going on, thus producing a moderate stimulation of the surface of the endometrium through the medium of the irrigating fluid. After cleansing the surface of the vagina and vulva, it is dusted with a bland, non-irritating antiseptic powder, markasol, and a solution of the same is used as a vaginal douche once or twice a day, as required. For vesical tenesmus the urethra is dilated with the same electrodes, and the bladder is washed out with a one per cent. solution of markasol. The same solution is used for the rectum.

Cicatricial contraction of the vagina in advanced cases may prevent the use of a pessary to correct a misplacement if this complicates the case. In these cases, as well as where the organ is prolapsed, the author would prefer ventral suspension to hysterectomy.

Senile endometritis is usually regarded as most intractable, and is trying for both physician and patient. Yet the author says he knows of no gynecological disorder, the treatment of which is undertaken with more certainty of success.

ARSENIC IN THE TREATMENT OF GASTRALGIA.

In the *Lancet* for July 4th, Sir James Sawyer, M.D., of Birmingham, says: "Further observation in practice has confirmed my favorable opinion of the curative efficacy of arsenic in the various painful neuroses included under the name gastralgia. I have already laid before the profession my earlier experience in the subject. Romberg's well-known description of gastralgia is classical. He distinguished two forms of the malady—gastrodynia neuralgica, which he held to be hyperæsthesia of the gastric branches of the pneumogastric nerve, and neuralgia cœliaca, which he attributed to hyperæsthesia of the solar plexus. Clinical experience confirms the views of Niemeyer and of Henoch that this distinction is difficult and of doubtful utility in practice. Gastralgic affections, severe and slight, are rare in hospital practice, and frequent among private patients, especially in those of nervous temperament. I need scarcely observe that for obvious reasons the diagnosis of gastralgia is one which should neither be lightly made nor negligently maintained. But pain arising in the stomach when the organ is empty and relieved by the ingestion of food is almost diagnostic, as the late Dr. Wilson Fox taught, of its nervous nature and origin. With due regard to the causal concomitants and antecedents of gastralgia, arsenic cures the disease. It is best to give the drug in a pilular form. I exhibit a twenty-fourth of a grain of arsenious acid made into a pill with two or three grains of some tonic vegetable extract, such as gentian, three times daily halfway between meals. Scarcely any other medicinal treatment is needed in cases of moderate severity, and the use of the remedy should be continued for some weeks. In severer cases I use counter-irritation to the epigastrium or duly proportioned activity. I have usually found a full and varied dietary suit gastralgic patients far better than a restricted 'dyspeptic' regimen. It is in such cases that Trousseau's maxim is so true—that we should know what a patient does eat before we advise him upon what he may feed."

THE TREATMENT OF OTORRHEA.

In a late paper on this subject, Dr. E. B. Dench, of New York, said that a profuse chronic purulent discharge from the ear, which had lasted for more than two months, evidently came from the middle ear, and of course the membrana tympani would be found perforated. If the purulent discharge was scanty, it was probable that its source was the external meatus. If the discharge was serous and not very abundant, it probably came from the middle ear. While pressure in front of the tragus or traction on the auricle in the adult would elicit pain in cases of disease in the external auditory canal, this sign did not hold true in children, because in them the bony canal was absent. Where the drainage was free, the discharge would cease as soon as all necrotic tissue had been discharged. The first object in treatment should be to maintain efficient drainage, and then keep the parts aseptic. The speaker preferred syringing out the ear to the use of gauze drainage. The process of syringing could be done thoroughly only when the precaution was taken to draw the auricle outward, upward, and backward in the adult, and outward, downward, and backward in the child. Peroxide of hydrogen should not be instilled into the ear in cases of purulent otorrhea, because the solution was irritating and the quantity of gas liberated when it came in contact with pus was apt to cause an injurious degree of pressure within the ear. The best solution for irrigating the ear was a warm 1-to-3,000 or 1-to-5,000 solution of bichloride of mercury. The patient should be cautioned against plugging the ear with cotton in the interval between the irrigations, as this practice was very apt to result in the formation of feruncles about the meatus. All forms of powders were objectionable in the ear, as they formed hard crusts with the discharge, thus obstructing drainage and irritating the ear. In conclusion, Dr. Dench quoted statistics, showing that out of 820 cases of suppurative disease of the middle ear, 2.5 per cent. had terminated fatally.—*N. Y. Med. Journal.*

TREATMENT FOR THE FALLING OUT OF HAIR.

Extraits du Formulaire Clinique de Vienne. Translated by Rutherford Gradwohl:

℞	Tinturæ cinchonæ rubræ	℥ j
	Tincturæ cantharidis	m. xxx
	Acidi Phenici	gr. xxx
	Tincturæ ignatii	m. vijss
	Aquæ cologne,	
	Oleum coco, aa, q. s. ad	℥ iv

M. Sig.—Make one or two applications daily.

Or wash with the following exciting mixture:

℞	Tinc. cantharidis	gr. v
	Essence rosemarini,	
	Essence lavender, aa	gtt. x
	Eau de Cologne	℥ iij
	Olei sabinæ	grs. xv
	Spts. vini	℥ j

Or,

℞	Liquid vaseline	ʒ jss
	Pilocarpine	gr. ss

Or, finally, apply:

℞	Quininæ sulphatis	gr. xv
	Acidi aceticin,	
	Acidi phenici, aa	gr. v
	Misturæ oleo-balsamic	ʒ iijss
	Olei ricini	ʒ jss
	Glycerini	ʒ ss

—*Ex.*

A CODE OF MEDICAL ETHICS.

To the graduating class in the medical department of the University of Pennsylvania, Dr. H. C. Wood said: "Consider every member of the profession as one of your own family, and having an inherent right to your medical services, but do not abuse this right; consider any discovery or invention you may make as belonging to the general profession; never in any way laud your own medical skill or attempt to supplant in public or private estimation one of your medical brethren; join as soon as may be the incorporated companies of your fellows for scientific and social intercourse, and for the cultivation of that professional conscience which often binds men more closely than their personal sense of right and wrong; through good and ill report, stand by members of your own profession, unless they be guilty of moral evil."--*Medical Age.*

STERILIZATION OF SYRINGES.

Hofmeister has found that leather, like catgut, can be effectively sterilized without the slighest injury, by soaking it in a 2 to 4 per cent. solution of formalin and then boiling it. Syringes that screw together instead of being glued or cemented, are better adapted to this method. The water in which they are placed to boil must not be hot enough to crack the glass.—*Cbl. f. Chir.*, July 4.

MEDICAL ITEMS.

DR. W. C. HUMPHRIES, Acworth, Ga., writes that he has a first-class Beck microscope to sell. Any one wishing a microsope at a reasonable price would do well to write to Dr. Humphries. H.

THE Managing Editor, Dr. Grandy, has returned from New York, where he has been pursuing studies in the Eye, Ear and Throat. Hereafter he will confine his practice to diseases of these organs.

"DOCTOR," said the patient, "I believe there is something wrong with my stomach." "Not a bit," replied the doctor promptly. "God made your stomach, and he knows how to make them. There's something wrong with the stuff you put in it, may be, and something wrong in the way you stuff it in and stamp it down, but your stomach is all right." And immediately the patient discharged him.—*Ex.*

THE editors of *Mathews' Medical Quarterly* announce that with the January issue of that publication its name will be changed to *Mathews' Quarterly Journal of Rectal and Gastro-Intestinal Diseases.* This is a change which has been deemed necessary for some time, as it is essential that the title of a medical journal should convey to the reader an idea of its contents, and this has not been the case with its name from the beginning. There will be no change in the policy of the journal in the least. As it will continue to be the only English publication devoted to diseases and surgery of the rectum and gastro-intestinal tract, the articles which will appear in it will be limited to these subjects. The journal will continue to be edited by Drs. J. M. Mathews and Henry E. Tuley, and published in Louisville, Ky.

THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS, at its ninth annual meeting, held in Richmond, Va., elected the following-named officers for the ensuing year, namely: President, James F. W. Ross, M.D., Toronto; Vice-Presidents, George Ben Johnson, M.D., Richmond, and John C. Sexton, M.D., Rushville, Ind.; Secretary, William Warren Potter, M.D., Buffalo; Treasurer, Xavier O. Werder, M.D., Pittsburg. Executive Council: Charles A. L. Reed, M.D., Cincinnati; Lewis S. McMurtry, M.D., Louisville; A. Vandeveer, M.D., Albany; J. Henry Carstens, M.D., Detroit, and William E. B. Davis, M.D., Birmingham.

The next annual meeting was appointed to be held at the Cataract House, Niagara Falls, N. Y., Tuesday, Wednesday, Thursday, and Friday, August 17, 18, 19, and 20, 1897.

DR. JOHN B. HAMILTON, editor of the *Journal of the American Medical Association*, has resigned from the U. S. Marine Hospital Service, of which he was formerly Surgeon General, rather than submit to a transfer from Chicago to San Francisco, which must have hampered him in his editorial work, if it would not have quite prevented it.

The American Medical Association is to be congratulated upon its good fortune in retaining Dr. Hamilton in active charge of the *Journal*, which he has brought from comparative obscurity to a position second to that of no medical publication in the country, and which shows in each issue an imprint of his personality that would be missed by all who esteem the combination of broad scholarship, professional and literary acumen and executive ability—qualities so desirable in an editor, and possessed by Dr. Hamilton in an unusual degree.—*Ex.*

BOOK REVIEWS.

Over the Hookah: The Tales of a Talkative Doctor. By G. Frank Lydston, M.D., Professor of Genito-Urinary Surgery in the Chicago College of Physicians and Surgeons; Professor of Criminal Anthropology in the Kent College of Law, etc. Sold by subscription only. Price, in cloth, gilt top, $4.00. Over 600 hundred pages octavo. Profusely illustrated from the author's designs by C. Everett Johnson. The Fred Klein Publishing Co., Chicago.

Dr. Lydston has written a very interesting book for the busy doctor's diversion. These tales of a talkative (very talkative) doctor are ascribed to a Dr. "William Weymouth" who it appears had had a most varied experience as a practitioner, from the familiar "Doc" of the primitive western mining camp in the sixties to the esteemed family physician in a fashionable quarter of Chicago, and a college professor, of a modern date. The tales were told to a friend of the old doctor's, a medical student who seems to have been a very good listener. The doctor takes occasion, *en passant,* to express his views upon various semi-medical and sociological subjects, and one can easily see that the old gentleman was of broad comprehension and a thorough humanitarian. His reflections on criminal anthropology and the stigmata of degeneracy, in their medico-legal relations, are deserving of wide reading and consideration. The author gets tangled up somewhat on his negro dialect, though he makes an infinitely better success of it than most northern writers do. His "Uncle Abe" may have been originally "fum way down in Georgy," but it is safe to say that his original style of diction bore little resemblance to that here attributed to him. One remark of old Abe's will probably strain the understanding of the average Northern mind. "De ole Jedge . . . treated de niggahs jes' like dey wuz his own chillun. Doan' s'pose you folks up Norf undahstan' nuffin 'bout dat, sah, but dar's many er po' ole niggah dat wish dar nebbar wuz no war!" Some of the stories of

Western life have a distinct Bret Harte flavor, and some of the character sketches that Dr. Weymouth draws "over the hookah" have very striking counterparts in the writings of the latter author.

The book is well bound and printed and nicely illustrated. It will not fail to interest both the medical and non-medical reader.

A TREATISE ON SURGERY. By American Authors. Edited by Roswell Park, M.D., Professor of Surgery and Clinical Surgery, Medical Department, University of Buffalo, N. Y. In two very handsome octavo volumes, comprising 1,600 pages, with 786 engravings, largely original, and 37 full-page plates in colors and monochrome. Volume II, Special Surgery. Price per volume, cloth, $4.50; leather, $5.50. Net. Lea Brothers & Co., publishers, Philadelphia and New York.

The second volume of "Park's Surgery by American Authors," deals with the whole domain of Special Surgery, and in connection with the first volume which comprised "General Surgery and Surgical Pathology," it completes this latest exponent of the world's surgical knowledge. Inspection of the list of contributors shows that Professor Park has been able to secure the co-operation of a most representative body of American surgeons, and likewise that he has assigned the subjects with rare discretion to those most competent to write authoritatively on each topic.

The editor, Dr. Park, describes the surgical diseases and injuries of the head in a very complete chapter of seventy pages. Dr. E. H. Bradford, of Harvard, writes of the surgery of the spine; Dr. F. S. Dennis, of New York, of the surgery of the chest; Dr. M. H. Richardson, of Boston, of the abdomen and hernia; Dr. C. B. Kelsey, of New York, of the rectum and sigmoid flexure; Dr. R. W. Lovett, of Boston, of orthopedic surgery; Dr. R. Matas, of New Orleans, of amputations; Dr. Duncan Eve, of Nashville, of the heart and large bloodvessels, etc. The surgical diseases and injuries of the eye, ear, nose and throat are described respectively by Drs. C. S. Bull, C. J. Blake, and D. B. Delavan. Everything of common interest and importance connected with the surgery of hose regions is concisely described. The last chapter (by the editor) is devoted to skiography, or the application of the Roentgen rays to surgery, giving description of the apparatus and the method of using it.

These two volumes of Park's Treatise on Surgery make the most important late contribution to American surgical literature.

A TEXT-BOOK OF MATERIA MEDICA, THERAPEUTICS, AND PHARMACOLOGY. By George Frank Butler, Ph.G., M.D., Professor of Materia Medica and Clinical Medicine in the College of Physicians and Surgeons, Chicago; Professor of Materia Medica and Therapeutics, Northwestern University, Woman's Medical School; Attending Physician to Cook County Hospital, etc. W. B. Saunders, 925 Walnut street, Philadelphia. Price, $4 net.

This book, which is dedicated to the medical students of the United States, is well arranged and beautifully printed. A description is given of the various drugs in use, which is sufficient, but not too long for the purpose of bringing salient points before the mind of the student. A section is especially given over to correcting of prescriptions, common errors in Latin being pointed out. The book ends with a clinical index in which the various drugs used in each disease, are given with reference to their description in the text. Dr. Butler is to be congratulated upon a production so complete and useful. A. W. S.

PHYSICIAN'S VISITING LIST FOR 1897. P. Blakiston, Son & Co., 1012 Walnut street, Philadelphia.

This popular visiting list has now reached its forty-sixth year of publication, and hardly needs more than mentioning. This one contains a few more pages, and the leather backs are a little thicker than preceding editions. It is a convenient and serviceable visiting list.

THE NON-HEREDITY OF INEBRIETY. By Leslie E. Keeley, M.D., Dwight, Illinois. Published by Scott, Foresman & Co., Chicago.

The author endeavors in these pages to set forth in detail his theory that inebriety is a disease that can be readily cured, and that it is not hereditary.

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LUTHER B. GRANDY, M.D., MANAGING EDITOR.
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ORIGINAL COMMUNICATIONS.

A PATHOLOGICAL STUDY OF TYPHOID FEVER.

BY CHARLES MINOR BLACKFORD, JR., M.D., ATLANTA, GA.,

Instructor in Normal and Pathological Histology and Bacteriology in the Atlanta Medical College.

Among the diseases common and most feared in the eastern and southern portions of the United States, the one usually known as typhoid fever stands first in importance. The name is singularly ill-chosen, for it does not resemble typhus fever in any particular; but the term, suggested by Dr. T. B. Anderson of Virginia in 1819, and given to the world by Louis six years later, has become so engrafted on our language that it will probably never be displaced. The German term, abdominal typhus, is equally misleading, and though the name current in England, enteric fever, is short and expressive, its use is much restricted, and in this country both the profession and the laity know it so well as "typhoid" that it is likely to remain unchanged.

Although we consider this one of the well-marked diseases, one having peculiar diagnostic characteristics of its own by which it may be differentiated from all other affections, it is only in comparatively modern times that such has been the case. It was considered a modification of typhus, or a manifestation of malaria, and later it was supposed to be of nervous origin. Spigelius, Lancisi and Baglivi in Italy; Hoffman in Germany; Willis, Sydenham, and Huxham in England, all described the disease clearly and exactly, and in the eighteenth century Morgagni in France gave a clear delineation of the course of the disease and of the intestinal lesions. Hildenbrand of Vienna published an account of it in a treatise written in 1811, in which he distinguished between it and "ordinary typhus," but his account of ordinary typhus is so vague that it is difficult to understand which he is describing. In 1819 Dr. T. B. Anderson of Norfolk, Virginia, wrote a differentiation and suggested the name "typhoid" for the milder affection, but failing to publish the article, he lost the credit of it, as so many of our Southern discoverers have done before and since. Louis of Paris ascribed the same name in 1825, and his students on their return to America introduced it into our nomenclature.

If so much doubt existed as to there being such a disease, it is not strange that its pathology should have been equally obscure. So long as it was considered only as a manifestation of typhus, it was not deemed worthy of particular study, and after it had been differentiated from that affection, it was more mysterious than ever. For a long time it was thought that it was essentially an affection of the cerebro-spinal nervous system, and had as a synonym the name of nervous fever. The lesions in the abdominal viscera were thought to be incidental, if not accidental, and no particular connection between them and the disease was imagined.

The revival of interest in morbid anatomy that followed the publication of Virchow's epoch-making book on cellular pathology had, as one result, the demonstration of the invariable presence of intestinal inflammation or ulceration in all cases of enteric fever, and from this invariable accompaniment to the assertion that this particular lesion was the essential morbid feature, was but a short step. The danger point was now seen not to be the brain or spinal cord, but the ileum, and the death to be feared was from peritonitis and not meningitis.

No one now doubts that the intestinal lesions are the characteristic pathological features, but until recently these lesions were insufficient to explain the symptoms. There is nothing in an ulceration of the ileum to produce the coma, the prostration, and the peculiar range of temperature observed at the bedside, and in vain was every organ examined to find further light on this puzzling problem.

It is evident from the most cursory examination that the symptoms are those of septic intoxication of some kind, and until the peculiar poison is understood all attempts to unravel the mysteries of the disease will be in vain. So insidious is the advance of the malady that it is usually well advanced before it is recognized by either the patient or physician, and the chance opportunities of studying the early lesions are so infrequent that much has to be inferred from the appearances found in the later stages.

After infection a period of incubation succeeds, during which a struggle between the body and the pathogenic agents is being waged. As to the details of this conflict we are in the dark, and we are even ignorant of which of the component parts of the tissues is the particular defensive agent. A specific micro-organism, the bacillus typhosus, gains access, and by the products elaborated by the vital processes of this vegetable parasite, the familiar chain of symptoms is produced.

This micro-organism was first demonstrated by Eberth in 1880, and was obtained in pure cultures by Gaffky in 1884. As its discoverers were German, it is not remarkable that it should be generally known by its Teutonic name and be referred to in systematic works as the bacillus typhi abdominalis, the Germans, despite their pathological knowledge, persisting in calling this disease abdominal typhus.

This micro-organism is found in the form of small, scattered colonies through the spleen, liver, glands of the mesentery, the affected glands of the intestines, and in fatal cases it has been found in the kidney. In appearance this bacillus differs quite markedly from many others, as it has flagella arranged around it, small spiral arms, varying in number from one to twenty, and from three to five times as long as the bacillus itself. It stains more slowly than many of the other bacteria, and parts with the coloring matter readily, so that permanent mounts are apt to fade after a time. A fuller consideration of this bacillus is given below.

For a long time the infectious nature of the disease was under discussion. It was considered a "filth disease," and was supposed to originate *de novo* as a result of using polluted drinking water. The apparently sporadic cases seemed to bear out this opinion, and the difficulties encountered, even with the light we now possess, in tracing the line of infection were insurmountable to those who knew not what they sought.

Reversing the usual order, it will be well to consider the morbid anatomy of this affection before going into its etiology, for these two aspects of its pathology are so interdependent that it is impossible to understand the one without the other. As the infection usually occurs in the intestinal canal, it is there that we should look for the chief lesions, and they are very characteristic. Very shortly after the infection of the patient there is a catarrhal inflammation of the small intestine, with a desquamation of the epithelial lining, and small necrotic areas will also be found on the surface of the mucous membrane. Soon afterwards the glands of the submucosa become enlarged, especially near the ileo-cecal valve, and particularly is this the case with the glands forming Peyer's patches and the solitary glands. These, which usually are about the size of a pin-head, swell to such a size that they are readily perceived, and even project into the lumen of the intestine. On microscopic examination it will be seen that there is a distinct hyperplasia, the white blood cells are increased in number and there is evidence of a proliferation of the connective tissue cells of the stroma. The follicles are of a grayish-white color, showing a great increase in cells, and at times the small glands project so much that they are pedunculated. In this change the glands are but fulfilling their physiological functions and combating the infection as they do in tuberculosis and other general diseases; and here again they share the usual fate of the lymph glands. As the disease continues they degenerate, soften, and suppurate, forming the ulceration that is so marked a feature of the disease. It is likely that the growth of the bacilli elaborates some material like the digestive ferments that aid in dissolving the tissues and producing this breach of continuity. It is well known that many of the commoner bacteria liquefy the gelatine of their culture media, and that the bacillus tuberculosis elaborates a material that by its chemical influence brings about the gelatinous degeneration found around tissues in which tubercular processes are going on, and it is not improbable that a similar enzyme may be produced by the bacillus typhosus. Before the bacilli can gain access, the normal mucous membrane of the bowel must be destroyed, as these mucous membranes generally interpose an impassable barrier to micro-organisms, but it is rare indeed that there is no lesion in the whole extent of the intestines through which the micro-organisms may pass. Having reached the sub-mucous layers of the bowel, they there find all the essentials for existence, and multiply with astonishing rapidity.

This bacillus is described by Sternberg as "a motile, ærobic, non-liquefying bacillus, which grows readily in a variety of culture media at room temperature," which translated into non-technical terms, means that it has the power of independent motion, grows in the presence of air, and does not liquefy its gelatine culture medium. This fact may seem to militate against the idea advanced above, that the bacillus might elaborate a digestive material that would aid in dissolving the cells of the intestinal mucous membrane and the lymph glands, but that a certain ferment does not act on one material by no means shows that it does not act on another. Pepsin dissolves some compounds, but it is powerless with others; tripsin, ptyalin and the other digestive ferments are each restricted in their action, and should the bacillus typhosus elaborate such a "digestive ferment," it is very possible that it may be unable to dissolve gelatine and yet be a powerful solvent to the intercellular cement substance.

In from thirty-six to forty-eight hours after inoculating a gelatine tube, small white colonies are visible, which, when viewed by the microscope, are seen to be somewhat irregular in outline and of a faint yellowish tinge by transmitted light. The growth is fairly luxuriant in most media, but a marked peculiarity in the growth on potato was noticed very shortly after the specific bacterium was isolated. It is that the growth is invisible. Instead of the dirty whitish pellicle presented by most micro-organisms when grown on this medium, there is merely a glistening, watery looking streak, but on examination it will be seen that the bacilli are growing vigorously.

This is not the place for a discussion of the merits of the bacillus of Eberth to be regarded as the cause of enteric fever. The failure to produce the disease in lower animals, owing to some immunity possessed by them, has been a serious drawback, and we are forced merely to draw such inferences as we may from the invariable occurrence of the bacilli and the behavior of animals inoculated with them. The experiments of Fränkel and Simmons show that considerable quantities of a pure culture must be injected into the animals to produce death, and at the necropsy, the micro-organisms may be recovered from various organs, though not from the blood. If only a small number be used, recovery will invariably ensue, and it thus seems as though the pathogenic power lay in toxic substance produced by the growth of the bacilli in the culture medium. In 1885 Brieger had isolated a toxic ptomaine called by him typhotoxine, which, if injected into guinea-pigs, caused a slight flow of saliva, frequent respiration, dilation of the pupils, profuse diarrhea, paralysis, and death within forty-eight hours. He at the time thought that this was the active pathogenic agent, but he has since modified his view and is inclined to think that this is mixed with other products and does not work the evil alone.

The modes in which the bacillus gains access to the body is of the greatest practical importance. It is tenacious of life, more so than are many other varieties. Sternberg states that he has preserved cultures in bouillon in hermetically sealed tubes for more than a year, and that development on gelatine plates occurred promptly at the end of that time. In sterilized distilled water it preserves its vitality for more than four weeks (Bolton), and in sterilized sea water for ten days (De Giaxa). In putrefying feces it will live for several months (Uffleman), and in earth on which cultures had been poured, for five and a half months (Grancher and Deschamps).

The practical bearing of this is apparent. The history of the epidemic at Plymouth, Pa., in 1885, is familiar to most readers, but is so instructive that it will bear repetition. Plymouth, a town of some eight thousand people, is supplied in part with water from a reservoir fed by a mountain stream. During January, February, and March of that year, a man was ill with typhoid fever in a cottage some sixty or eighty feet from the stream, and his attendants were in the habit of throwing out the dejecta on the ground toward the stream. During the time of the man's illness the ground was frozen hard and covered with snow. Early in April there was a sudden thaw with much rain, and at the same time the patient had many and copious actions from the bowels. On the 10th of April cases of typhoid fever appeared in the town and soon cases were reported at the rate of about fifty a day, the disease attacking in a all about 1,200 people. In nearly every case those attacked drew their drinking water from the reservoir, and in those who were not supplied from that source it was found that they had gotten a temporary supply from it at some time when their usual source was unavailable. In this case it was shown that a freezing temperature only causes a suspension of life in the micro-organisms, and that they are ready to spring into full activity when suitable conditions of temperature and pabulum are presented. Ballard investigated an outbreak in Islington, and traced it to a contaminated milk supply. Only those obtaining milk from a certain dealer were affected, and it was discovered that the cans were washed in contaminated water, the bacteria in the water clinging to the sides of the can flourishing in the warm fresh milk, and thus gaining access to its victims.

The investigation made by Prudden into the outbreak at Yale College confirms the same story. In this case he found that a contaminated water was the cause, and so constantly is the source of trouble found in drinking water that it is almost an axiom that "every case of typhoid fever is a case of water poisoning."

In examining a suspected water supply, advantage is taken of the fact that the bacillus will live under conditions that are death to most other varieties. As all water contains many varieties of bacteria, some mode of isolating the bacillus typhosus is essential, and a few of the simplest are given in the hope that they may be tried by physicians who have to deal with cases of the disease. A very simple one is that suggested by Holz, which consists of merely adding ten per cent. of gelatine to the juice of raw potatoes. He asserts that while the typhoid bacilli thrive on this medium, many other varieties fail to develop, and it may be rendered still more reliable if 0.05 per cent. of carbolic acid be added. Holz states that a $\frac{1}{1000}$ solution of carbolic acid prevents free development, and so he does not use a greater strength than $\frac{1}{5000}$. Parietti has devised an excellent "test medium." It is prepared and used in the following manner: Make a solution containing

Carbolic acid	5 parts.
Hydrochloric acid (pure)	4 parts.
Distilled water	100 parts.

Next prepare several tubes containing ten cubic centimeters of neutral sterilized bouillon, and add from three to nine drops of the acid mixture to each tube, sterilizing carefully after mixing the solutions. Then add a few drops of the suspected water, and put the tubes in the incubator. If, after twenty-four hours, the bouillon has become cloudy, the cloudiness is due, according to Parietti, to the presence of the typhoid bacillus.

A very simple test is that suggested by Hazen and White, which depends on the fact that common water bacilli do not grow at a temperature of 40 C., whereas the typhoid bacilli grow luxuriantly. The present writer can testify to the efficiency of this simple method.

The casual relation of this particular micro-organism may be said to have been established, and this dreaded scourge is one of the preventable diseases. If spring and well water in cities or towns be sedulously avoided, and the most ordinary precautions taken in procuring a clean supply for drinking purposes, it would be almost unknown. In every case where more than one of a family is attacked, it is the plain duty of the physician to examine the water. If in doubt, he should have some experienced bacteriologist to aid him, and if it be found impure, the abandonment of the supply should be urged. However poetic, there are few things more productive of disease than

> "The old oaken bucket, the moss-covered bucket,
> The home of the microbe, that hangs in the well."

REMOVAL OF SIX INCHES OF SMALL INTESTINE. UNION OF THE DIVIDED ENDS BY MEANS OF THE MURPHY BUTTON.

BY HUNTER P. COOPER, M.D.,

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Mr. M. O., of Cordele, Ga., sent for me September 26th, and gave me the following history: He was operated on in April last for appendicitis by Dr. John B. Deaver in a hospital in Philadelphia, and he states that the whole appendix was removed. The wound was stitched up apparently without any drainage. Twenty-three days after the operation an abscess formed and discharged through the cicatrix of the wound; this has continued to discharge ever since. Twelve days before coming to Atlanta he began to suffer with constipation, vomiting, and violent abdominal pains. On examining patient I found two discharging sinuses in the cicatrix, and in each of them what appeared to be a silkworm gut suture could be seen. Immediately above the cicatrix was a mass in the abdominal wall half the size of a hen egg and very tender on manipulation. The patient stated positively that there had never been any discharge of fecal matter through these two small openings, nor had any fecal odor been noticed by him in the purulent discharge. I naturally, therefore, thought that I had to deal with an abscess of the abdominal wall caused by the retained sutures.

I etherized him at the Grady Hospital on September 28th, assisted by Dr. Ward, the house surgeon, and the other members of the house staff. I extracted the two sutures, which were found to be of silkworm gut. I then carefully cut through the bridge of tissue between the two sinuses in order to give a free vent to the discharge. As soon as the blood and discharge had been washed away

I found, to my horror, that I was in the cavity of the small intestine. A close examination then revealed a large opening in the small intestine at a point opposite its mesentery. This opening was over an inch long, and extended transversely nearly half the diameter of the bowel. Its edges were ragged and ulcerated, and firmly adherent to the cicatrix. My knife had made no part of the opening. The edges everywhere were thick and inflamed, and it was apparent he had suffered no fecal extravasation, because of the very minute size of the openings leading from the cavity of the bowel to the skin. Of course it was evident that the operation had at once assumed much graver proportions than were apparent at first. There was nothing to be done but to endeavor to effect a closure of this opening, and its size both longitudinally and transversely precluded the idea of anything else than a resection of this part of the bowel. I therefore dissected the edges of the opening away from the abdominal wall, and found myself in a mass of inflammatory adhesions very dense and vascular, in which a coil of the small intestine was matted in the omentum, mesentery and adjacent coils of intestines.

After a most tedious dissection the part of the intestine involved was released and drawn up into the wound. It was then found that this whole section of the intestine was inflamed and thickened; its mesentery thick and indurated, and the peritoneum stripped off it over quite a large area, wherever it had been adherent to other structures. I then tied off the mesentery for about six inches along the border attached to the intestine, compressing the intestine above and below, and excised about six inches of it. The Murphy button was then introduced into each end of the cut intestine, and an end-to-end approximation made. The abdomen was then thoroughly washed out with a large quantity of sterilized hot water, and a large iodoform gauze wick introduced into the abdominal cavity with its lower end reaching the part of the intestine where the button was inserted. The wound was then stitched up, leaving an opening in its middle through which the iodoform gauze was brought for drainage. On account of the numerous adhesions and the large number of ligatures that were necessary to control the hemorrhage, the operation consumed three hours. The patient stood it fairly well, and came out from the effects of the ether without any nausea or vomiting. When the operation was about half concluded Dr. Elkin came into the room and kindly remained and lent me valuable assistance.

September 29th. Patient was very restless for a number of hours after recovering from the ether, and by my direction Dr. Ward, the house physician, gave him several hypodermics of one-eighth of a grain of morphine. He passed a fairly comfortable night, and this morning his temperature was $98\frac{2}{5}$, pulse 94. He had no vomiting, there was no distension of the abdomen, and he had been able to retain milk every three hours in small quantities.

Five P.M. Temperature $99\frac{1}{5}$, pulse 100. Patient has not vomited at all to-day, and has taken milk every three hours; complains a good deal of abdominal pain, but there is no distension of the bowels.

September 30th, 9 A.M. Temperture $98\frac{4}{5}$, pulse 94. Patient had a pretty comfortable night, although he did not sleep much. Vomited some curdled milk once in the night. No distension of the abdomen and no pain. He took last night three grains of calomel at 8 P.M., and a small dose of salts this morning.

Six P.M. Has been nauseated all day. At 1:45 vomited over a pint of green fluid; temperature 98, pulse 98. Discontinued the salts in the forenoon on account of his nausea. Ordered one-quarter of a grain morphine hypodermically at 8 P.M.

October 1st, 7 A.M. Temperature $98\frac{3}{5}$, pulse 84. Slept quietly large part of the night. Had no vomiting, although he complains of nausea all the time. Has retained nourishment twice since midnight. No distension of the abdomen and no pain. Bowels have not moved, although he made an effort after using an oil enema.

Six P.M. Temperature $99\frac{3}{5}$, pulse 78. Has taken nourishment to-day every three hours, vomited once; bowels have not moved. He is quite comfortable.

October 2d, 9 A.M. Temperature $99\frac{1}{5}$, pulse 80. Had a very comfortable night, sleeping most of the time. Has not vomited. This morning early he had a large, free, natural action. Wound was dressed this morning, and the gauze drainage removed. There is no distension of the abdomen, and his general condition seems much improved.

October 5th. Patient has done very well ever since last note. This morning on removing the dressing, there was a distinct fecal odor in the discharge. Late this evening fecal matter came through freely, soiling the dressings and bed.

October 10th. Since last note patient's general condition has been excellent, but there has been very free discharge of fecal matter in the dressings.

October 14th. During the past four days the fecal discharge has been rapidly diminishing, and is now very slight. He passed the button last night.

October 15th. During the past twenty-four hours there has practically been no discharge of fecal matter whatever from the wound.

I should remark that the whole wound united by first intention, except at the point where the gauze drainage came out, and it was at this point that the fecal matter made its discharge.

October 24th. Since last note there has been no fecal discharge whatever from the wound; granulations now entirely fill the wound, and there is a small granulating surface not larger than the little finger nail which has still to heal. Patient discharged from the hospital to-day.

He returned to his home about November 1st, at which time there was simply a little granulating spot, and he had gained flesh and strength very rapidly.

There are several remarkable features about this case. In the first place, it is very remarkable how a person with such a large opening in the small intestine could remain so free from fecal discharge externally. Second, what is to me a still more remarkable fact, is the rapidity with which the fecal fistula which followed the operation healed. I would also like to state that the insertion of the Murphy button renders end-to-end anastomosis of the intestine a matter of great simplicity.

SYPHILIS AS A CAUSE OF ABORTION.*

By DR. J. A. OUIMET,
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Syphilis is one of the causes of abortion. It is to-day universally admitted that among syphilitic women, labor at term is the exception when the malady is of recent date, and has not been combated by treatment vigorously applied and sufficiently prolonged.

When I was spending a year in the service of Professor Tarnier, of Paris, I was struck with some of the accidents caused by syphilis, and I then undertook some researches, the results of which I am now going to publish. Syphilis being a cause of considerable mortality among infants, indeed, according to Professor Fournier, one of the greatest factors of mortality in children, if in showing the remedies for the disease we are able to point out also the necessity of treatment during pregnancy, we believe that we will contribute our feeble part toward saving the lives of some children very often condemned to death before they are born. Numerous statistics have been prepared as to the frequency of abortions caused by syphilis, and all show with terrible eloquence that this disease is a potent cause of abortion and premature labor. It plays an important rôle in the mortality of infants, especially in cities. If in the country, it is a disease not yet very widespread, I am able to state that it is, unfortunately, too frequent in small cities, and very prevalent in large cities. Professor Pinard reports that out of 687 women delivered at the obstetrical clinic in 1882, thirty-four were affected with syphilis—a little less than five per cent. If one examines the influence of syphilis on pregnancy, this influence will be found to vary with the conditions under which the disease presents itself in a particular case. The absolute frequency of abortion or of premature labor is difficult to fix in an exact manner. The proportion of accouchements before term among syphilitic women is, according to Diday, 61 per cent.; Stoltz, 66 per cent.; Hecker, 27 per cent.; Fournier, 47 per cent.;

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Pilem, 36 per cent. Out of a large number of statistics furnished by different authors, one may accept 36 per cent. as an approximate estimate. To be very exact, it is necessary to take into account the age of the syphilis, its intensity, and the nature and effects of the treatment that has been pursued. This proportion of 36 per cent. is too small, if one applies it to those women who, at the time of conception, were in the full evolution of syphilis, or to those who during the first months of their pregnancy have exhibited intense manifestations of the disease. On the other hand this proportion is too great if it applies to those women in whom, at the time of conception, the syphilis is already old, especially if the patient has been well cared for; for the accidents of abortions caused by syphilis are obedient to the law of decadence, the law of Diday, according to which the intensity diminishes as the disease grows older. At first there are successive abortions, followed by premature births, and finally by labors at term. In the last two cases the age of the syphilis has a great influence upon the life of the child, and here we find the same decadence: at first dead infants, next living children, but tainted with congenital syphilis, and finally healthy children.

At what period of pregnancy is abortion among syphilitics most frequent? While it is more or less frequent at all periods, nevertheless it becomes more so as one approaches the seventh month, the maximum of frequency being between the sixth and seventh month; one finds it less often between the seventh and ninth month. Bertin, Diday and Deville are of the opinion that the infection of the fetus is a frequent cause of abortion at the fifth, sixth and seventh month; in the second half of pregnancy, according to Olshausen. The period of pregnancy at which expulsion of the product of conception occurs certainly varies according to the age and gravity of the syphilis; it also depends upon whether or not the woman has submitted to methodical treatment, as we shall see when we discuss the results obtained by treatment. According to Diday, the abortion corresponds to the maximum of the potency of the syphilitic virus. It is especially to be feared in the early period of syphilis, and Diday even declares that all women not treated abort regularly during the first three years of their disease. It is not rare to see in a syphilitic woman the first pregnancy terminated by abortion; subsequent pregnancies may go to term. The latter modification, frequent among women who have submitted to proper treatment, is also observed among those who have not been treated, thus confirming the general law proposed by Diday. Finally one must remember that there are degrees of syphilis. There is benign or light syphilis, and the intense or malignant.

Among women who have never submitted to specific treatment, it is common then to have repeated abortions. There is a series of abortions recurring in the same women, to which has been given the name *avortements à repetition.* In the etiology of these repeated abortions, the cause of which one may not be able to determine, syphilis, without doubt, occupies an important place. Trousseau said: "When you are called to a woman with whom abortion or premature labor is a habit, you will be wrong if you do not consider syphilitic infection among the possible causes when you are making up your judgment." The repetition of abortions without manifest cause may be a sign proclaiming the presence of syphilis, and Depaul and Fournier, in the presence of such abortions, believe themselves authorized in employing specific treatment, the results of which are often conclusive. These abortions may be repeated a considerable number of times, six not being exceptional. Fournier has reported the case of one woman who aborted nine times, and another who had ten successive abortions or premature labors, and who was delivered at term in her eleventh labor of a syphilitic child, which died after four days.

Whether the abortion depends upon utero-placental lesions, or is caused by the fetus itself, the mechanism is always the same. The woman perceives that the movements of the fetus diminish from day to day, soon they cease altogether, and the sympathetic troubles of pregnancy which had existed up to that time disappear also. The belly goes down, the breasts diminish in size, there is a feeling of heaviness in the loins and in the lower abdomen, and also a sensation of an inert body in the uterus which changes its position with the movements of the woman, obeying the laws of gravity. Soon uterine pains set up and everything passes off as an ordinary abortion.

The Causes of Abortion in Syphilitics. Almost all observers attribute the cause of abortion to the fetus itself. Syphilis certainly places the fetus in a condition of lowered vitality, and while it may not be necessary for the fetus to be dead in order to be expelled, nevertheless it is a common observation in the great majority of abortions among syphilitics that the fetus is dead, and more often macerated. According to Blaise, the death of the fetus may be caused by a direct and primitive poisoning by a morbid principle. It is analogous to that which occurs in lead poisoning. Syphilis, like lead-poisoning, may cause abortion by inflicting injury upon the health of the mother, and by exercising a direct action upon the product of conception. The analogy of syphilitic infection is even greater with certain virulent affections, such as measles, scarlatina, and small-pox, which can be transmitted from mother to fetus. Often the fetus is dead, almost always it is affected with organic lesions, more or less grave, which certainly are concerned in the premature expulsion. The abortion, perhaps, shows syphilitic involvement of the wall of the uterus, of the placenta, or of its membranes. There is a syphilitic placenta which presents special features, and this placenta is seen only in cases of congenital fetal syphilis. These lesions may be on either the fetal or maternal surface of the placenta. Syphilis of the maternal surface of the placenta may cause death of the fetus by producing a thickening, more or less extended, of this part of the placenta; this produces first a compression and then an atrophy of the villi.

The influence of paternal syphilis on pregnancy and the product of conception. Has the father a direct influence on the product of conception—that is, can a father transmit syphilis to a fetus without infecting the mother? This question has been the subject of many a controversy. While the older syphilographers attributed to paternal influence a preponderating and often an exclusive part in the hereditary transmission of syphilis, other authors more modern, but equally exclusive, deny to the father any influence whatever. To-day the opinion which generally prevails is a sort of middle-ground; in other words, that the influence of the father is far from being as common as that of the mother. Fränkel admits that the syphilitic virus of the father may act directly upon the ovum through the semen, and that in this case the mother may remain healthy. Syphilis in the father certainly has an effect upon pregnancy, for there are numbers of cases in which the father has been syphilitic at time of marriage and the mother has had first an ovular abortion followed later by an embryonic. The father then takes mercurial treatment, and the mother has a premature labor; he continues treatment, and she goes to term. Other cases no less demonstrative are those in which the mother, having had children one after another and at term by a first husband, has successive abortions in a second marriage, and in which specific treatment of the father has resulted in the birth of a healthy child at term. Fournier says that the fetus of a syphilitic father and a healthy mother is liable by the fact of the paternal syphilis to die before term. Out of 43 unions, in which the father alone was syphilitic, and which furnished 105 infants, Kassowitz found 25 terminations of pregnancy before term, and 80 births at term with syphilis. Fournier formulates the conclusion that "given a syphilitic father and a healthy mother there are some chances for the infant issue of this couple to be born exempt from syphilis." There are many more chances if the father submits to mercurial treatment before the conception. If the age of the syphilis in the mother plays an important part in terminating the pregnancy, this is particularly the case with the father. Some authors are of the opinion that tertiary paternal syphilis does not have any influence upon the product of conception; that time diminishes the potency of the syphilitic diathesis.

The mother may become syphilitic at the time, or soon after she becomes pregnant. In this case one can easily see what will happen to the product of the conception; she will either abort of a dead or macerated fetus, or she will be delivered of an infant which will have the finest chances to inherit syphilis from its mother. When the father and mother are both syphilitic, of course the conditions for heredity are doubly favorable; to a syphilitic ovule is added the action of syphilitic spermatozoids, the development taking place in a medium of the same nature; a biparental heredity.

The treatment of syphilis during pregnancy. In the presence of the marvelous results obtained by mercury in the treatment of syphilitic pregnant women, one is astonished at the tardy acceptance of this idea and at the resistance which it has encountered. Mauriceau, a famous observer, recognized the excellent effects of mercury on a syphilitic pregnant woman, and prescribed it. Bertin said that a pregnant woman with syphilis could perhaps be radically cured during her pregnancy, and the infant perhaps be saved from the disease by the mercurial treatment; and he added, an antivenereal treatment, prudently administered, does not produce abortion, as the older doctors feared. Although in some cases abortion has happened in the course of a mercurial treatment, it is more often the effect of the disease than of the mercury. Observation has proven that infected pregnant women have aborted more often when they have submitted to no treatment than when they were treated during pregnancy. To-day the majority of doctors employ mercury without inconvenience in the treatment of the syphilitic pregnant woman. Far from thinking that it may produce an abortion, one now knows that very often it is the only means of preventing it. Benjamin Bell said that mercury, properly administered, almost always succeeded in preventing the abortion. He also said that specific treatment of the pregnant woman could produce two results: (1) diminish the frequency of the abortions, and (2) often preserve the infant from syphilitic infection.

The pregnant woman tainted with syphilis demands all the solicitude of the physician; she deserves to be treated with care, attention and vigilance. Many times, says Fournier, have I obtained from specific medication the first and inestimable success in preventing abortion, in carrying the woman to term. The infant born in these conditions, it is true, does not escape syphilis, but he is born viable and susceptible of living with the disease, and of being cured by subsequent treatment. Indeed, one has seen in such circumstances infants born healthy, free from every syphilitic symptom.

One ought to commence the treatment as soon as the syphilis is diagnosed, and indeed, if one has the good fortune to be called to diagnose a case of syphilis in parents, before conception occurs;

one will then have more chances of preserving the life of the child. Fournier is of the opinion that as soon as one has recognized the presence of syphilis in a pregnant woman, he should proceed without hesitation; introduce treatment immediately. The later treatment is introduced in the course of pregnancy, the less will be the chances of saving the life of the infant, and still less of assuring its health. Diday says that when one has recognized syphilis in a pregnant woman, there is only one thing to do—prescribe mercury immediately, and push its administration with all the vigor which comports with the constitution of the patient and the manner in which she responds to treatment. How long should the treatment be kept up? At least as long as pregnancy lasts, as long as the disease may cause abortion. On this point there are some rules laid down by that master, Professor Fournier: "One is able to cure syphilis, or rather, to impose silence on the manifestations of the disease, only at the price of treatment long, very long, extending over many years. This treatment, to be efficacious, needs to be methodical; it should be alternately interrupted and resumed, and by different methods. In a word, syphilis is a chronic malady which is eliminated only by chronic treatment."

The treatment of syphilis during pregnancy is the same as that without pregnancy, unless there is some disturbance of the digestive organs which will require a certain prudence. It is certain that one should combat all syphilitic manifestations in full measure, but the mercurial treatment—the only efficacious treatment—being able to cause vomiting and diarrhea in some women, should be handled with precaution in order not to irritate the stomach and intestines, and thus perhaps cause abortion. One should be able to bring to bear on the pregnant woman all the modes of mercurial treatment as well as the various mercurial preparations. Mercury alone, or when it is necessary, combined with iodide of potassium, may be administered by the digestive organs, the stomach or rectum, by the respiratory organs, by the skin or by the subcutaneous method. The most common methods of treatment are by the mouth and mercurial frictions. One preparation very commonly employed, is the solution of Van Swieten,* although with a pregnant woman the corrosive sublimate which this solution contains may irritate the gastro-intestinal mucous membrane and soon may not be tolerated. Fournier gives preference to the protoiodide of mercury, which is pleasant and better borne by most patients. He prescribes five to ten centigrams (gr. ¾–1½) per day, taken at meal times. The phenate of mercury often gives good results. One may employ also the syrup of Gibert, composed of the biniodide of mercury and the iodide of potash. If the ingestion of mercury cannot be long continued with some women, it will be well to resort to mercurial inunctions along with the internal administration. It is always useful and often necessary to add some tonic: wine, wine of quinine, elixir of Garus, iron, arsenic, etc., in order to maintain the tone of the digestive apparatus.

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* Liq. hydrargyri oxymuriatis: Hydrarg. bichloridi, ammon. chlorid. aa. gr. x, aquæ oi.

Conclusions. Syphilis is a potent cause of abortion. The abortion is caused by lesions of the fetus itself, or of its adnexæ.

It occurs ordinarily about the seventh month. The father alone being syphilitic, he may transmit the disease to the product of conception; he is much more liable to do so if the syphilis is recent at the time of conception.

The mother may bring into the world a syphilitic infant, and remain herself immune.

When the father and mother are both syphilitic, the infant rarely escapes infection.

A syphilitic pregnant woman has a greater chance of bringing into the world a healthy infant when the syphilis is old. The nearer the primary infection occurs toward the end of pregnancy the better the infant's chances of escaping infection.

The infant born of a syphilitic mother may present manifest syphilitic lesions, or it may be healthy in appearance, and become syphilitic after some months, or even years.

Mercurial treatment instituted at the beginning of pregnancy may enable the mother (1) to carry the pregnancy to term, or (2) to bring into the world a living infant, though perhaps syphilitic—or (3), in some cases to bring into the world a living infant without lesions. Sometimes an infant born of syphilitic parents remains free from the disease, when the mother has been treated during pregnancy.

When the father is syphilitic, and the mother becoming pregnant, submits to mercurial treatment, there are good chances for the pregnancy to end at term in the birth of a healthy infant.

THE VALUE OF CERTAIN THERAPEUTICS IN FUNCTIONAL AND ORGANIC NERVOUS DISEASES*.

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The vast number of cases of neurasthenia, largely the results of modern modes of living and high pressure work, to-day throng the offices of physicians in search of the "Fountain of Health" from whose crystal waters restoration and relief will flow. Alas, like Ponce de Leon, their futile journey is along the swamps and morasses of failure—nay, even of despair, and fortunate are they whose physicians realize their *ignis fatuus* and turn them from the errors of their ways. The sooner these cases quit following the will-o'-the-wisp in the shape of the mineral water fad, the sooner they shun fashionable watering-places, the sooner they stop swallowing pills, powders and potions, the better will be their lot. And how can relief and cure be obtained? By hard work. The hardest labor a neurasthenic patient ever underwent is the labor of patiently and painstakingly following a line of rational therapeutics. The neurasthenic state is marked by more or less persistent diminution of nervous energy or force with increased susceptibility to external impressions, and involves in its octopus grip the whole nervous and general system; originates from a multiplicity of causes, and possesses its thousands of subjective symptoms. Lately its pathology and pathological anatomy have become well understood and from a rational basis for therapeutics, diminished and weakened nerve energy with great nerve irritability, characterize the disease and underlie nearly all its symptoms. The lack of proper cell nutrition together with the accumulation of fatigue products, a failure to eliminate same, and assimilate appropriate nutritious pabulum presents a pathological problem full of interest. These cases are all chronic, though there is no danger to life. Really and truly it is little short of marvellous how cures can be wrought out of the material at hand, and though the difficulties are great they are rarely insurmountable. But to reach a perfect result requires plenty of time, great sacrifice on the patient's part, a variety of remedial measures out of the ordinary, and a vigilance that never tires. The patient must be taken from his surroundings, in order to remove and lessen the etiological factors or break up their vicious cycle. They need rest. Not the questionable rest of travel, sea-shore or mountain, but real rest that will permit of the storage of energy, while at the same time remedial measures may be adopted to remove the retained toxic products, or prevent their reformation. It must be rest, partial or total, and this in a sanatorium, where we can regulate their daily life. The bad features ot rest can be overcome by the usage of massage, vibration and electricity. This well recognized mode of treatment, so ably worked out by Mitchell, has given me the most satisfactory results, when further amplified by certain hydro-therapeutic measures, such as the dripping sheet, pack, douches, rain baths, etc. Minute attention to details, a corps of specially trained massage operators, nurses and attendants are absolutely essential to the successful carrying out of every feature. This is no place for a description of a mode of treatment so well known; I cannot praise too highly its results in carefully selected cases. The partial rest cure, coupled with a generous diet, hydrotherapy, vibration, exercise and electricity has in a goodly number of cases yielded brilliant results. The hearty co-operation of the patient is essential, and the physician must be master of every move. In hystero-neurasthenia and hysteria itself, its field of usefulness is vastly broadened and its value much greater. In fact, in this psychoneurosis it frequently is the only method by means of which we can attain a satisfactory result. Nowhere in the range of therapeutics are so many mistakes made as in hysteria. Little attention and indiscriminate prescribing are the usual routine methods of treating these cases, when, in reality, careful, painstaking and systematic use of this valuable mode of treatment will attain results which are brilliant in the extreme, raising the apparently lifeless and hopeless human to a sphere of happiness and usefulness beyond his or her most rosy dream. The necessary equipments are such as to absolutely preclude its application in private homes, or general infirmaries, and many failures are a very natural result. A calm, judicial bearing, the inspiration of confidence, a thorough knowledge of every detail of the case, an intricate knowledge of human nature, the patience of Job, every mechanical, electrical, and hydro-therapeutical appliance is essential to a proper management of these cases. Drugs are valueless and are merely used for passing complications. Hypnotics, sedatives and opiates should not be used.

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*Read before the Mitchell District Medical Society.

The constantly increasing experience of neurologists confirm every word written. But there are many neurasthenics and hystero-neurasthenics who cannot place themselves in a sanatorium, but who can take regular office treatment or a partial rest cure. To these a carefully laid out schedule of rest, exercise, diet, hydrotherapy, massage, and electricity will frequently give very satisfactory results. These cases have many of the causative factors still acting, and as a consequence labor under many difficulties. These must be told and taught that persistence in treatment is the only way by means of which they can recover their health and retain it. In these cases we must limit our medicinal treatment to a minimum, and Dercum suggests only two drugs possessing any value whatever, viz.: antipyrin and bromide, both of which must be used with great care only for short periods. Complications must be met, but their treatment should not be such as to overshadow the real treatment of the case. Surgery is practically useless or merely preparative in these cases.

The treatment of epilepsy of functional or organic origin has been the opprobrium of medicine. The bromides, Flechsig's opium-bromide treatment, codeia, borax, belladonna, digitalis, and adonis vernalis are still considered the best drugs. In old long standing cases Flechsig's method for a combination of bromide, codeia, and adonis vernalis has yielded me the best medicinal results. In no class of cases must we search so thoroughly for causative factors, functional and organic. Many cases thought functional are really organic, and cases of idiopathic epilepsy are becoming smaller and smaller. I agree with Peterson that reflex epilepsy is so rare it is a curiosity, and ocular tenotomies, operations for phimosis, removal of the ovaries, etc., are unjustifiable, *as a cure*, but ocular defects, phimosis or purulent ovaries should be removed in order to pave the road for the neurological work. This should consist of careful moral control, exercise and a careful diet; some occupation, the use of the above remedies, combined with the persistent and unremitting use of hydrotherapy and electricity continued for one or two years. Collins has shown what can be done by persistent treatment, and I could duplicate some of his worst cases with successful results in my own practice. In epilepsy I have, through the above combinations, secured such results, that I feel every case should be given such a trial. The value of mechanical vibration or massage in paralysis is a method that I have used for the last five years with great satisfaction, and am of the opinion that it is far superior to the manual massage in the rapidity and permanence of its results. These cases are usually considered so hopeless that little can be done. This has not been the case in a fair number of instances in my own experience.

The writer offers an apology for the fragmentary nature of this paper, for any one of the subjects lightly touched might form the basis of a number of articles without probing deeply under the surface. He has simply voiced his personal results based on a somewhat extended experience.

TREATMENT OF ANAL PRURITUS.

Try first very warm lotions or irrigations two or three times a day; patient to avoid constipation and always to precede movement by irrigation of oil and to anoint the anus with vaseline. Then try in succession named the following preparations:

Morning and evening a painting of the following glycerole: (*a*) Alum, 4 grams; calomel, 2 grams; glycerine, 20 grams. This pomade: (*b*) Calomel, 4 grams; vaseline, 30 grams. (*c*) Oleate of decocaine, $\frac{1}{20}$ part; lanoline pure, 3 parts; vaseline, olive oil, *āā*, 2 parts. (*d*) Red oxide of mercury, 4 grams; vaseline, 30 grams. (*e*) Introduce into anal orifice a tampon of absorbent cotton soaked in a solution of oxide of zinc to 4 p. 30. (*f*) Cauterize the painful parts with a solution of agnoz, $\frac{1}{10}$. (*g*) In quite rebellious cases turn to linear scarifications or to cauterizations with the galvano-cautery.—MORAIN, *Journal de Médecin de Paris.*—(*Ex.*)

SOCIETY REPORTS.

SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

Ninth Annual Meeting, Held in Nashville, Tenn., November 10, 11 and 12, 1896.

The Association met at the Nicholson House, and was called to order at 10 A. M., by the President, Dr. E. S. Lewis, of New Orleans.

The "Address of Welcome" was delivered by the Hon. John Bell Keeble, of Nashville, which was responded to by President Lewis.

"Vaginal *versus* Abdominal Section for Pus in the Pelvis." This paper was read by Dr. W. D. Haggard, Jr., of Nashville, in which the author recounted the transitional periods in the treatment of pus in the pelvis—vaginal puncture, superseded by abdominal section and removal of pyosalpinx, total uterine castration per vaginam by the French, and through the abdomen by the American school. These operations had given way to modern vaginal section, and evacuation and drainage of all pus pockets. The abdominal route affords visual inspection of the field. The attack on morbid masses could be made with safety to visceral integrity. If pus accumulations were multiple, rupture and peritoneal soiling were inevitable; that is the supreme disadvantage of abdominal incision. The author had often seen the pelvis deluged with pus with impunity. He had also seen patients die within twelve hours from fulminant sepsis from peritoneal contamination. The writer referred to a mortality of 18.5 per cent. in a series of collected cases of laparotomy for pus, done in five metropolitan hospitals in the last year, and asked what must it be in the "unheard from precincts," and in the hands of the great unwashed? The abdominal method offers the best approach in tubercular inflammation of the ovaries and tubes and in small unilateral pus tubes. The author referred to the advantages of exploring the pelvis for retro-uterine tumors, and inflammatory adnexæ by vaginal section.

The geography of pus in the pelvis in most cases makes vaginal incision extraperitoneal, a minor procedure giving major results. No shock, no risk, no disturbance in convalescence. In prolonged sepsis from large abscesses, posterior section and drainage were a life-saving procedure. The special indications were in (1) early cases of acute suppurating salpingitis. (2) Incipient post-puerperal peritonitis. (3) Large pyosalpinx and true pelvic abscess. The first group included early gonorrheal and abortion cases. In puerperal cases, incipient peritonitis and puddles of pus in Douglas' space imperatively demanded incision. Should simple pus letting in any of these cases not effect a cure, subsequent operation for removal of the relics of previous ravages can be done without the dangers incurred in the presence of pus. The field of vaginal section is to prevent suppuration in early cases, to anticipate it in puerperal cases, and to save life in desperate cases. Its application to the pelvic inflammatory processes and to pus in the pelvis was one of the greatest surgical triumphs of the age.

"Cholelithiasis." A paper on this subject was contributed by Dr. A. M. Cartledge, of Louisville, in which the author reported several interesting cases. He dwelt upon cholecystostomy and cholecystenterostomy, pointing out the indications for each operation. He considered cholecystostomy as the only operation that was applicable to the cases cited. In his opinion there were no cases that primarily demanded cholecystenterostomy.

Dr. James McFadden Gaston, of Atlanta, agreed with the essayist that in ordinary cases of gall-stones in the gall-bladder, with obstruction of the cystic duct, the simplest procedure was to lay open the abdominal wall, attach the gall-bladder to the incision, and remove the gall-stones. But in a large proportion of cases of complete obstruction, he doubted whether there would be restoration of bile through the cystic duct into the gall-bladder. With reference to the comparative value of cholecystostomy and cholecystenterostomy, the two operations were applicable to entirely different conditions. No one would operate and expect benefit from a cholecystostomy except to establish drainage for the bile in a case of permanent occlusion of the common duct, and this was the only condition in which the advocates of cholecystenterostomy had ever claimed anything for it.

Dr. George Ben Johnston, of Richmond, Va., spoke of the diagnosis of gall-stones. He is convinced that if examinations of suspected cases of gall-stones were as careful and minute as they should be, surgeons would frequently find them. It has been his experience that enlargement of the gall-bladder does not always occur where a gall-stone exists, but that a condition which simulated enlargement of the gall-bladder frequently did exist, this condition being due to the presence of numerous dense adhesions found in the neighborhood of the gall-bladder, gluing it to every tissue with which it came in contact. One thing which struck him as very singular in connection with the presence of gall-stones was that the size of the stone or stones seemed to make no difference in the production of symptoms. In regard to hemorrhage, it was generally admitted that in cases in which cholemia was profound, they were the ones in which we were to expect hemorrhage, and by no known method could this hemorrhage be successfully controlled. The cholemic condition seems to invite a fatal hemorrhage. The experience of operators in this field of surgery was that when cholemia was profound hemorrhage of a fatal character was to be expected. He considers cholecystostomy a proper procedure in all cases, except in those where the obstruction was in the common duct and could not be relieved.

Dr. W. E. B. Davis said surgery of the gall-bladder for the removal of gall-stones had given brilliant results, but there were still questions in regard to operative procedures on the ducts that were not as yet definitely settled. He did not believe the essayist referred to cholecystostomy as being the choice of operation in cases where the obstruction of the duct could not be removed; that he must have had in mind the procedure advocated by Murphy of resorting to this operation in case of gall-stone in the gall-bladder where there was no obstruction in the duct. Murphy resorted to cholecystenterostomy instead of cholecystostomy, and he thought the essayist did not intend to convey the idea that he would not do a cholecystenterostomy where the obstruction in the duct could not be removed. Cholemic cases were bad to operate upon. Perhaps in not more than 5 or 6 per cent. of the cases was the obstruction found in the common duct. Some years ago the author made experiments which conclusively showed that the surgeon could incise the duct and drain with gauze without peritonitis following. A paper on this subject was read by him before the American Medical Association in 1892, since which time he had done further experimental work in which sutures were not used after the stone was removed from the duct, and while several of the cases were already very nearly dead from profound cholemia, and eventually did die, yet in the cases in which this method was resorted to, the abdominal cavity was walled off, and peritonitis did not result.

Dr. F. W. McRae, of Atlanta, reported a case in which there were repeated attacks of colic with profound cholemia. An operation was undertaken with the idea that the obstruction was in the common duct, and that there were stones in the gall-bladder. On opening the abdomen in the presence of several physicians the liver was found much enlarged and reaching almost to the umbilicus. Instead of finding the gall-bladder enlarged, he found a fibrous cord not larger than his index-finger. The common duct from disuse was reduced to a mere cord. A calculus was found in the hepatic duct extending up into the transverse fissure of the liver. He did not know what to do for a case like this. And after consultation with his colleagues, closed the abdomen. The patient died five days later from exhaustion. If anything could be done for such patients he would like to know it.

"Mental Complications Following Surgical Operations." Dr. John T. Wilson, of Sherman, Texas, read this paper. He said the subject of mental disorders produced by or following surgical operations had not been discussed to any great extent, and until within the past two years only a passing notice had been given to it. It was a strange fact that while surgical operations would sometimes cause serious mental disturbance, on the other hand those same operations would sometimes cure them; especially was this the case with some melancholiacs. Many females laboring under attacks of melancholia, caused by some disease of the genitals, had been cured when relieved of the physical—by operation; others had been much improved, and yet some had received no benefit. The question might very properly be asked, why a surgical operation should produce an attack of insanity. This could no more be answered in every case satisfactorily than could the question, why some persons became insane from the many other causes to which it was attributed, for in most cases the mental complications were a surprise and no good reason could be given why they should follow. In others, however, a logical explanation might be had. If the patient was a high-strung, nervous individual, easily excited, unable to bear pain, the great and increasing dread of the anesthetic, the operation, or both, would so affect him that he would lose control of the will power and the explosion would come after the operation and reaction from the anesthetic. In many of these cases, probably a majority, there was an hereditary taint or a strong neurotic tendency.

The author quoted Mairet, who thinks (1) that it is in those individuals who are predisposed by heredity or other grave causes—alcoholism, infectious diseases, etc.—that surgical operations give rise to insanity. (2) In the constituent elements of an operation that might act on the brain the two most important ones were the anesthetic and the degree of surgical traumatism with its after-effects, of which disturbed nutrition plays a very important part. (3) When predisposition also is considerable the anesthetic alone may produce insanity, or it may result even after minor operations. It is, of course, necessary to take into consideration the mental state of the patient prior to the operation, especially in those graver ones where questions of life or death are frequently involved.

"Splitting the Capsule for the Relief of Nephralgia." Dr. George Ben Johnston, of Richmond, Va., read a paper with this heading, in which he drew the following conclusions: (1) Nephralgia is not always associated with a demonstrable lesion. (2) When other evidences of kidney diseases are wanting the pain is due to a too tight capsule. (3) Nephralgia may, and frequently does, simulate symptoms of gross tissue changes or mechanical irritants. (4) Where severe and persistent pain in the kidney exists without other evidences of renal disease, exploratory operation is indicated.

(5) When inspection, palpation, and needle puncture fail to disclose a condition sufficient to account for the pain, the capsule should be freely opened.

"Uretero-Ureteral Anastomosis." Dr. J. Wesley Bovee, of Washington, D. C., read a paper on this subject and reported an interesting case. The author dwelt at length upon the literature of the subject, quoting from the contributions to the surgery of the ureters by Van Hook, Fenger, Kelly and Cabot in this country, and the classical works of Glantenay, Liaudet, Tuffier, and others in Europe. He drew the following conclusions: (1) Uretero-ureteral anastomosis, whenever possible, is far preferable to any other form of ureteral grafting, to nephrectomy and to ligation of the ureter. (3) It should be done preferably by lateral implantation or by oblique end-to-end anastomosis, though the transverse end-to-end, or the end-in-end methods may be safely employed. (4) That constrictions of the caliber of the ureter do not usually follow attempts at suturing in closure of complete transverse section of the duct. (5) That nephrectomy for transverse injuries of the ureter *per se* is an unjustifiable operation. (6) That simple ligation of the ureter to produce extinction of the function of the kidney is too uncertain to justify its practice. (7) That drainage is not necessary if the wound be perfectly closed and the tissues are septic.

"The Treatment of Pregnancy and Labor Complicated by Fibroid Tumors of the Uterus." Dr. Henry D. Fry, of Washington, D. C., read this paper. He advanced two propositions: First, that the production of abortion is unjustifiable; second, that labors presenting serious difficulty to delivery are best treated by abdominal section and removal of the child and tumor. By maintaining this position the interests of the mother are not relegated to second place. While saving the life of many infants, the maternal mortality will also be diminished. After making a few brief remarks on the natural history of fibroid tumors complicating the pregnant state and reporting a few cases that had come under his care, he considered the treatment.

Dr. Howard A. Kelly agreed with the conclusions of the essayist. There was a tendency on the part of the profession to interfere too much in cases of pregnancy complicated by fibroid tumors of the uterus. He had been called in consultation to see a number of such cases, but the indications were not such in some of them as to warrant the induction of premature labor. In many instances a consultation had been the means of postponing operative interference. When fibroid tumors complicating pregnancy were situated in the upper part of the uterine body, unless large and multiple, they were comparatively unimportant. If situated in the lower part of the uterus, and it is found that as pregnancy advances they can be pushed up, this should be done in order that the labor may proceed naturally. On three occasions he had opened the abdomen and had done a myomectomy for tumors complicating pregnancy, the women subsequently going to full term and being delivered normally.

Dr. E. S. Lewis said it often falls to the lot of some physicians to meet with a series of anomalous cases, such as those that had been reported by the essayist, whilst other physicians, with probably quite as large experience, would pass through life without meeting some of the complications that had been mentioned. During an experience extending over thirty-four years he had never met with a fibroid tumor which justified interference before labor; that is, a fibroid occupying the lower segment of the uterus and impinging upon the pelvic cavity. Within the past year he had delivered two women having large fibroids. In one case where pregnancy supervened, after suspension of menstruation for two months, he was unable for several months to determine the existence of the pregnancy. The uterus then reached above the umbilicus, but the woman was found pregnant and was delivered at full term with forceps, but with no extraordinary difficulty. The other woman had an abdominal tumor the size of a six months fetus. Although she had been married a number of years, she was about forty when she became pregnant. The tumor occupied the upper portion of the body of the uterus, but she was delivered without the use of instruments. He could conceive that in a case of fibroid situated in the broad ligaments or occupying the lower segment of the uterus, seriously impinging upon the cavity of the uterus, hysterectomy would be inevitable, but it has been his fortune to escape such cases.

"Uterine Drainage as a Factor in the Prevention and Relief of Pelvic Inflammation," by Dr. R. R. Kime, of Atlanta, who drew the following conclusions: (1) A uterine tampon is not a true drain, and even obstructs drainage in many cases. (2) Capillary drainage is secured by carrying a strip of gauze up into the uterine cavity, not packing it, and then it drains for a few hours only. (3) Gauze cannot even act as a capillary drain when either end or center is constricted, or when coated with mucus. (4) Gauze when saturated with serum, unless it contains an antiseptic, forms a hotbed for germ development. (5) Never tampon the uterus in puerperal septic infection except to check the hemorrhage. (5) The good effect of a gauze tampon in cases of endometritis and after abortion is not due to drainage, but to its effects as a tampon, *i. e.*, checking hemorrhage, stimulating uterine contractions, prolonging medication to the endometrium, and acting as a surgical dressing. (7) The uterine drainage tube is the most essential factor in the treatment of puerperal infection and the best method of securing drainage when demanded in other diseased conditions of the uterus. (8) It will save more lives, relieve and prevent more pelvic complications than any other factor at our command.

Dr. W. E. Parker, of New Orleans, read a paper on "Gunshot Wounds of the Abdomen," and reported thirteen cases, with six recoveries. In his paper he made the statement that he believed, in the hands of men skilled in abdominal work, seventy-five per cent. of cases of wounds of the small intestine should recover if the cases were seen early, the prognosis being better in this class of cases than in any other. He advised an early and rapid operation in all cases.

As to the technique he said: (1) Unless the wound is well to one side, it is best to make a median incision, and it should be long enough to enable the operator to make a thorough examination of the abdominal contents. (2) The whole intestinal canal should, as a rule, be examined. (3) All peritoneal wounds should be sutured with silk Lembert sutures. Intestinal wounds should, other things being equal, be sewn in the long axis of the bowel. (4) If the liver is wounded better results are obtained from packing than from suturing it. (5) If the kidney has been wounded it is best to suture the peritoneal wound and treat the kidney extraperitoneally, if necessary. Of course he did not refer to those where the laceration and hemorrhage are so great that it is necessary to remove the kidney at once. (6) Drainage, except in late cases, is not necessary if all hemorrhage has been stopped. (7) Cases in which the intestines cannot be sutured without great risk of obstruction should be resected. (8) While enough time should be taken to do the work thoroughly, no time should be wasted. (9) Unless the bullet can be felt, search should not be made for it as it causes unnecessary delay. (10) The superficial wound should be closed with silk-worm gut or silver wire, and the author believes that a single suture should include the skin, abdominal walls and peritoneum.

Prognosis. (1) The sooner the patient is operated upon, the better the prognosis. (2) Those cases that have been reported in a series, including all cases, have shown a mortality of about sixty-two per cent. The prognosis is best in cases of wounds of the small intestines, and he believes that seventy-five per cent. of the cases will recover if seen early. By early he means in the first two or three hours. (3) We all know that alcoholics stand all surgical work badly, and yet most of these patients have been drinking before they come under our care. The prognosis in non-alcoholics would be better than in alcoholics. (4) If the stomach and intestines are empty the prognosis is usually improved by this fact.

After-treatment. While not favoring drugging these patients, strychnine and other stimulants should be given hypodermatically, if necessary. Especially should strychnine and alcohol in some form be given to alcoholics. Much depends on starting these patients well. If restless after the operation or suffering, small doses of morphine should be given. If the stomach is quiet and has not been injured, small amounts of water and Ducro's elixir can safely be given at the end of twenty-four hours and small quantities of milk or some light broth can be given. If the stomach has been injured the feeding should be per rectum. The diet should be liquid for at least two weeks. If there is shock with the clammy sweat that is sometimes seen, atropine, gr. $\frac{1}{60}$, should be given every three hours as may be necessary. When shall we give a purgative? This is one of the most important questions that we will be called upon to decide. If we give a purgative too soon our stitches may pull out, and if we wait adhesions may form and give us trouble. The bowels of these patients will usually act by themselves about the end of the fifth or beginning of the sixth day. If they do not, a mild purgative, assisted by an enema, should be given about the end of the sixth day, or on the morning of the seventh. As a rule, these patients should be kept in bed for at least two and a half weeks.

Dr. Howard A. Kelly offered the following resolution, which was unanimously adopted:

Resolved, That it is the sense of all the members of the Southern Surgical and Gynecological Association that in gunshot wounds penetrating the abdominal cavity, the proper routine procedure is to make an immediate exploratory incision.

Dr. Parker said, in closing, that the late Dr. Miles, in his first series of cases, reported thirteen cases, the percentage of recovery being nearly forty per cent. He had operated on probably twenty additional cases before his death, and the percentage of recoveries was very much better than in the first series. As to the medico-legal aspects of this subject, all surgeons should advocate the early opening of the abdomen, and if some fellow practitioner should get into trouble as a result of it the profession should stand together and support him.

Dr. L. S. McMurtry, of Louisville, read a paper entitled "The Evolution and Perfection of the Aseptic Surgical Technique." The author cited cases where surgeons of world-wide reputation had infected their patients through some imperfection in the aseptic surgical technique, and said the subject deserves more study and attention at the hands of operative surgeons than had heretofore been given to it. So far as instruments, dressings, etc., are concerned, surgeons had an absolute guarantee against sepsis in sterilization by heat; but when it came to the operative field, the hands of the operator and his assistants, they were reduced to mechanical and chemical methods of asepsis, which were certainly far less efficacious and reliable than sterilization by heat. Everything that comes in contact with the field of operation in the form of instruments and dressings is exposed to heat at a boiling temperature, hence the patient was safe against septic infection, but so much could not be said for the hands of the surgeon and those of his assistants and the field of operation.

"The President's Address." This was delivered by Dr. E. S. Lewis, of New Orleans. Reference was made to the brilliant achievements of the masters of the art of surgery who had passed away and of the galaxy of shining lights who had followed after, who had created an era in the medical history of this country for all future time. How can we wonder that the "magnificent records obtained by experts have proved alluring temptations to the inexperienced and ambitious," and led to abuses which have left a blot on the fair page of abdominal surgery. As a representative body of the surgeons and gynecologists of the South, it should condemn the reckless and thoughtless plunging in this delicate and difficult work, without knowledge, fitness, or preparation. The statistics of the skilled who had learned to minimize risk and cope with difficulties, should not serve as an argument with the inexperienced to secure subjects. The responsibility of human life should not be ignored in the craving and struggle for notoriety or fame.

With regard to the relative merits of the abdominal and vaginal operations for the removal of the ovaries and tubes, or of the uterus with the appendages, President Lewis said that divergent opinions are entertained and heated discussions have arisen. For the vaginal method it is claimed less shock is produced, better drainage is obtained, the abdominal walls are not weakened, and the extirpation of the uterus removes a menacing source of infection and of physical and nervous disturbance. For the abdominal operation, rapidity of execution is attended with increased security to adjacent organs, and facility of repair when injured, as the structures are always in view. The removal of the uterus is also condemned as complicating and unwarrantable unless justified by the state of the organ. In the modified vaginal method, as practiced by Doyen and others, the uterus is not necessarily sacrificed, nor a sound ovary and tube. It is in touch with the conservative movement of the day, and is in marked contrast with the ultra-radical operation of Péan.

"Memorial Address on Dr. Paul F. Eve." This was delivered by Dr. Richard Douglas, of Nashville, in which he said a retrospect of the lives of great men inspired us with the spirit of emulation and indicated to the ambitious mind the paths to fame. Professor Paul F. Eve had three distinguishing characteristics—energy, consistency of purpose and extreme modesty, and upon them he built for himself an everlasting reputation, and secured an imperishable place in the temple of fame. It is not alone as surgeon and teacher that his reputation rests. As a contributor to current medical literature he was a conspicuous authority. In military surgery he was without a peer. His experience in Poland had engrafted a taste for the work which, unfortunately, in later years, as one of the chief surgeons of the Confederacy, he had more than ample opportunity to gratify. As the result of his observation and work during the war of secession, he recorded many valuable facts which the surgeons of to-day would do well to ponder. As a lithotomist Dr. Eve was pre-eminent. While his preference was for the bilateral method, yet he was not wedded to it, and appreciated the many advantages of the suprapubic operation, and often practiced it, not, however, with the same success that he achieved by perineal section. Thoroughness characterized every undertaking of his life. When the great and good life of Dr. Eve came to an end, suddenly but peacefully, on November 3d, 1877, he had reached more than his three score years and ten, and, dying, left behind him a name that was destined to live on in surgery through many generations.

A paper on "The Relations of the Tubercular Diathesis to its Local Manifestations" was read by Dr. J. McFadden Gaston, of Atlanta. He said that in considering the various forms in which tuberculosis shows itself in different structures, there must be an underlying element pervading the whole organism, which results from a general determination of the secretions. Whether there is a predisposition to the development of tuberculosis in certain parts or organs in advance of any constitutional disease or not, this change occurs in connection with the general impairment of the vital forces which characterizes the tubercular diathesis. While most recent authorities do not make a distinction between scrofula and tuberculosis, there is a fundamental difference in their general and local development. We have different characteristics of tuberculosis when it involves separate organs and structures of the body in a distinctly circumscribed form, or is defined as miliary tubercle in different structures, and yet the dyscrasia which marks the lymphatics under the designation of scrofula differs materially from any of the varieties of tuberculosis heretofore recognized. Dr. Gaston touched briefly on the causes of tuberculosis, and reference was made to the papers that were presented before the last meeting of the American Surgical Association on important tubercular lesions. The presence of a condition recognized as a tubercular diathesis corresponds in some respects with the cachexia of carcinomatous tumors, and is held by many to be hereditary. There has been quite a revolution in the opinions of those best versed in the pathology of tuberculosis as to the transmission of this disease from parent to child, and also in regard to the communicability from one individual to another by ordinary contact in social relations. It is fair to conclude that great caution should be observed in putting restraints upon the marriage of those suffering with pulmonary consumption, and the association of those laboring under this disease should be limited as far as practicable. Finally, the predisposition to tuberculosis cannot be relieved by a surgical operation upon the diseased structures, but must be corrected by remedial agencies acting through the absorbent and secretory organs.

"The Rational Treatment of the Diseased Appendix by Operation." Dr. A. V. L. Brokaw, of St. Louis, read a paper with this title. He said the question had been vigorously discussed, is appendicitis a surgical disease at all times, or only surgical at times? He wished to be put on record as favoring the first proposition. He was aware that some ultra-so-called conservative practitioners claimed that the surgeon who advocated the removal of the appendix in every case when diseased, was a dangerous faddist, an extremest suffering from an inoculation of the operativus bacillus. He earnestly advocated early operation as soon as the diagnosis was made. Always operate when there is even a slight chance of saving a life, regardless of damage to statistics. Invariably operation should be insisted upon in the recurrent cases. With the knowledge of this dread disease, evolved from the mortuary chambers and the treacherous clinical course in a considerable percentage of cases, why should the rational treatment of all cases be other than by prompt surgery.

"Report of Cases of Appendicitis." Dr. James A. Goggans, of Alexander City, Ala., followed with a paper on this subject. From the fact that physicians generally take the stand that operative interference in appendicitis is called for only in exceptional instances where the disease advances to suppuration, gangrene and perforation makes the treatment of appendicitis a never ceasing controversy, hence his excuse for reporting a few illustrative cases that had come under his observation, hoping thereby to add what he could to harmonize the difference between the physician and surgeon on this, the most frequent and important intra-abdominal lesion, in his opinion, of the present day. The main point at issue between the physician and the surgeon in the treatment of appendicitis depended much on a perfect diagnosis. This, too, accounted in a measure for their differences of opinion as to where the medical treatment should end, and where the surgical treatment should begin. According to his experience in the management of this affection, there is only one course to pursue, namely, to remove the appendix just as soon as the diagnosis has been made. Usually he defers the operation until the bowels have been evacuated by first administering a few small doses of calomel, followed by a saline purge.

Dr. Charles P. Noble said the safest general rule was to operate as soon as a diagnosis of appendicitis was made. It was impossible to differentiate the cases which would recover from a primary attack from those that would die.

Dr. M. C. McGannon, of Nashville, recalled one case of appendicitis, a boy, where the temperature arose to 105. The patient was delirious. Upon opening the abdomen the appendix was found to be black but not perforated. It was easily removed, and the boy made a prompt recovery. He believes in many cases that if the physician waits and watches for distinct symptoms before operating patients will die.

Dr. A. M. Cartledge said the diagnosis was the only problem that practitioners were especially concerned with, together with the proper technique in the execution of the operation. The more he operates, the more he is inclined to believe we should operate on every operable case as soon as the diagnosis has been made. Mistakes were made by waiting and watching for symptoms to manifest themselves. Very few, if any, surgeons could tell when an appendix had ruptured.

Dr. George Ben Johnston said, for the sake of statistics, operations for appendicitis should be divided into two classes. First, those which are performed for recurrent attacks of the disease, and those which are employed for relief of the severer varieties where perforation has occurred, or will take place where there is pus present. If the surgeon is to operate upon recurrent cases, it is better for him to do so between the attacks in order that he may choose his time for operation. While there were cases of the disease that recovered without treatment, the best results were obtained by surgical interference.

Dr. W. E. B. Davis thought there were few cases of appendicitis that gave rise to general peritonitis in which the surgeon was called and could do any good. Frequently the surgeon was called too late. Even though the family physician recognizes the condition, it was not an easy matter to persuade the patient to be operated on within the first twenty-four hours, and unless these cases were treated surgically within twenty-four hours or thirty-six hours very few of them could be saved. All cases of severe attacks of the disease, in which pain is intense, if seen the first day and consent is obtained, should be operated on. In all cases where there is a second attack operative measures should be resorted to.

Dr. H. M. Hunter, of Union Springs, Ala., reported an interesting case of "Compound Comminuted Fracture of the Radius and Ulna Near the Wrist Joint." He had been unable to find a similar case on record in the literature of fractures. There were three points with regard to this case: First, that he was unaware of a similar fracture being reported. Second, he had never read nor heard of the method he had described to reduce the fracture of the forearm. Third, he had never seen nor read of such perfect results as were obtained in this case, the wrist having perfect motion, and there is absolutely no interference with supination and pronation.

Dr. N. P. Dandridge, of Cincinnati, reported a case of transperitoneal ligature of the external iliac artery for inguinal aneurism, in which he removed the aneurismal sac.

In the discussion, Dr. W. E. B. Davis also reported a case of ligation of the common iliac for aneurism of the external iliac, which was followed by an excellent result.

The following officers were elected:

President—Dr. George Ben Johnston, of Richmond, Va.
First Vice-President—Dr. F. W. McRae, of Atlanta, Ga.
Second Vice-President—Dr. W. E. Parker, of New Orleans, La.
Secretary—Dr. W. E. B. Davis, of Birmingham, Ala.
Treasurer--Dr. A. M. Cartledge, of Louisville, Ky.

The Association then adjourned to meet in St. Louis, Mo., the second Tuesday in November, 1897.

OZONE AS AN ANTISEPTIC.

Sir John E. Millais, the celebrated painter, and president of the Royal Academy, has just died of cancer of the throat, for which, in May last tracheotomy had to be performed. It is reported that since then the terrible distress attendant upon the latter stages of the malady was almost entirely obviated by the employment, for the first time, of ozone as an antiseptic. The gas was conducted from a reservoir of oxygen in a room adjoining the patient's, and was introduced through the tracheotomy tubes. It kept him alive and free from pain during the last three months, and also prevented the odor usual with cancer. His surgeon testifies that "he had practically no narcotics whatever," and that no man ever passed through such grave illness with such comfort as Sir John Millais during the period following the operation and the employment of ozone. This will indeed be welcome news to a large and increasing class of sufferers.—*New York Medical Times.*

CORRESPONDENCE.

WHO OWNS THE MEDICAL PAPER?

PHILADELPHIA, December 15, 1896.

To the Members of the Medical Profession:

I would be pleased to have an expression of opinion from you, either personally or through some medical journal, as to the relations of the lay-publishing firms of medical journals and the profession. The request is suggested by the fact that Messrs. Wm. Wood & Co., of New York, refuse to permit the editors of *The American Year-Book of Medicine and Surgery* to use in our abstracts of Medical Progress articles and illustrations first printed in the *Medical Record* and the *American Journal of Obstetrics.*

This decision seems to be wrong for the following reasons:

1. It prevents the dissemination of medical knowledge. The *Year-Book* condenses, systematizes, and criticises the year's medical work in a shorter space and more permanent manner than the journals, and has thousands of readers no single journal can claim or hope to reach. Every physician writes and publishes articles in order that every member of the profession may, if possible, learn of his work, and that science and progress may thus be furthered and humanity benefited. To interfere with such dissemination of our literature in reputable publications is, I think, discourteous and unjust to the profession and an injury to medical science.

2. This injustice and injury to medicine become all the more striking when physicians do not receive a cent of pay for contributions, from the publication of which the lay-publisher is supposed to make considerable financial profit.

3. No other publishers in the world, not even those who pay authors for their contributions, have in the least objected to our reproduction of quotations, abstracts, and illustrations from their journals.

Do you wish to limit the dissemination of your contributions to medical science by such an exclusion of them on the part of publishers from reputable publications? *Is this literature the property of yourself and of the profession, or not?* Does your gift of it to a journal make it forever the private property of the publishers of that journal? Is it not rather a loan for temporary use only?

Will you not hereafter demand that there be printed with your article a statement that the right of abstracting the text or reproducing illustrations is guaranteed?

Sincerely yours,

119 South 17th St. Geo. M. Gould, M.D.

The Murphy Button.

The *New York Polyclinic*, speaking of the use of the Murphy button in Germany, says that Schede and his assistants were able to obtain results in twenty-five cases which they could not have hoped for had the suture been employed. Five of the operations were gastro-enterostomies for benign causes, and all of the patients recovered. The same operation upon nine patients with carcinoma of the pylorus was followed by death in six cases; of six cases of carcinoma of the large intestine, three recovered; of four cases of strangulated gangrenous hernia, two recovered. In all these cases intestinal resection was performed. In a patient who sustained several wounds of the small intestines from a stab, 64 ctm. of ileum were resected, and the ends united by Murphy's button, recovery following. The length of time a Murphy button is retained has given rise to considerable discussion, and it is interesting to note that, although fourteen patients recovered, only seven of them passed buttons, as far as could be ascertained. The period varied from 12 to 34 days.—*American Jour. Surgery and Gynecology.*

Local Treatment for Neuralgia.

The following is the latest Italian method for relieving neuralgia:

℞ Menthol,	
Guaicol, aa	ʒ i.
Alcohol..	ʒ xviii.

M.

S.—A drachm of this mixture is to be rubbed lightly into the parts where pain is present two or three times a day. In the intervals a cotton dressing is employed.

—*Codex Medicus.*

EDITORIAL.

The office of the Business Manager of The Journal is Nos. 311 and 312 Fitten Building.

The editors are not responsible for views expressed by contributors.

Articles for publication should reach this office not later than the 15th inst.

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THE EFFECT OF FREEDOM UPON THE MENTAL AND PHYSICAL HEALTH OF THE NEGRO OF THE SOUTH.

Two important papers have just been published on this subject. ("What has Emancipation done for the Mental and Physical Health of the Negro of the South?" By Dr. J. F. Miller, Superintendent of the North Carolina Colored Insane Hospital. *North Carolina Medical Journal,* November 10, 1896. "The Increase of Insanity and Tuberculosis in the Southern Negro since 1860." By Dr. T. O. Powell, Superintendent of the Georgia Insane Asylum. *Journal of the American Medical Association,* December 5, 1896.)

Each author approaches the consideration of this subject from a wide acquaintance and extensive experience with what may be called the medical side of the negro question, and they have sought to present only facts as they are, without political sentiment or prejudice. Their papers, agreeing with each other on all points, are deserving of attention.

Before the negroes obtained their freedom, Dr. Miller says, insanity and tuberculosis were rare diseases among them.

Many intelligent people of observation and full acquaintance with the negro say that they never saw a consumptive or crazy negro until late years. But abundant testimony from practicing physicians throughout the South shows that the colored citizen no longer enjoys immunity from these diseases. In North Carolina in 1880 there were one hundred insane negroes; in 1895 there were three hundred and seventy-five.

The following table shows the number of colored insane and the ratio to population throughout the United States (U. S. Census Bureau):

1850	638	175	per million inhabitants.
1860	766	169	" " "
1870	1,822	367	" " "
1880	6,157	912	" " "
1890	6,766	880	" " "

Dr. Babcock, of the South Carolina Insane Asylum, says: "We cannot lose sight of the fact that on the basis of the census as compared with insanity in the whites, mental diseases in the negro have arisen from one-fifth as common in 1850 to one-half as common in 1880 and 1890."

The author's data relative to the extent of tuberculosis among the negroes since the war are obtained principally from the colored insane in asylums, and the testimony of these hospitals seems to be that tuberculosis among the blacks has increased *pari passu* with insanity. It would appear from the records of Southern hospitals for the colored insane that there is some peculiar relation between insanity and tuberculosis. In a number of these hospitals the mortality from tuberculosis in some form or other among the colored insane has varied from twelve to forty per cent. of the total causes of death.

Dr. Powell says that according to the census of 1860 there were 44 insane negroes in the State of Georgia, or one to every 10,584 of population. In 1870 there were 129 insane, or one to every

4,225; in 1880 there were 411, or one to every 1,764; and in 1890 there were 910, or one to every 943 of population. Dr. Powell quotes from a letter of Dr. Hopkins, of Thomasville, who says that in twenty years of practice on the plantations before the war, he saw only three cases of pronounced pulmonary tuberculosis. During the war, in the fortifications about Andersonville, where a large number of negroes were constantly employed, and where a register of all patients was kept, he did not see a case of consumption. Dr. Powell regards alcoholic intemperance and syphilis as important causes of insanity in the modern negro. In ante-bellum days secondary and tertiary syphilis were almost unknown among the plantation negroes. "If one had syphilis, the family physician was sent for, and treatment was continued until the patient was fullly cured. He had to tell from whom it was contracted, and if it was from a neighboring plantation the owner was notified, and the individual infected was subjected to the same treatment." The author believes that insanity and tuberculosis are closely allied. "The sudden outburst of insanity among the colored race of the South came associated hand in hand with tuberculosis."

We close with some conclusions from these papers:

"The rapid increase of insanity and consumption in this race is due to a combination of causes and conditions. This race has developed a highly insane, consumptive, syphilitic and alcoholic constitution, which predisposes them to diseases which formerly they were free from. In this disturbed and unstable condition they seem to be totally unable to resist the slightest exciting causes. They are liable to succumb much more readily than the whites; especially is this true in regard to insanity and consumption. These causes could not have existed prior to 1860 to any large extent, or we would have had the same pathological changes and results that we have now. Up to 1865 it was to the interest of the owners not to allow them to violate the laws of health. Therefore their hygienic surroundings were carefully guarded from their youth. Their lives were regular and systematic, and they were absolutely restrained from all dissipation and excesses, and when sick they had the very best medical attention and nursing until pronounced restored by the physician. Freedom removed all hygienic restraints, and they were no longer obedient to the inexorable laws of health, plunging into all sorts of excesses and vices, and having apparently little control over their appetites and passions. It is very manifest that these morbid tendencies and susceptibilities have been growing for the past thirty years; hence their unstable condition, and susceptibility to and inability to resist attacks of disease."—(Powell.)

"Having shown that under his former manner of life the negro enjoyed a wonderful immunity from brain and lung trouble, I confidently assert that the germs of these troubles came to the same man and race in consequence of his changed environments and the manner of his life which followed.

"In his ignorance of the laws of his being, the functions of citizenship and the responsibilities and duties which freedom imposed, demands were made upon the negro which his intellectual parts were unable to discharge. In his former condition none of these things disturbed his mind. Immediately the restraining influences which had been such conservators of healthfulness of mind and body were removed, thousands left the quiet homes and regular life of the country for crowded and badly ventilated houses of the towns.

"The negro in slavery had no thought for the morrow, wherewithal he should be fed and clothed, nor did the claims of family press upon him to worry and affect his mind; no ambitious hopes stirred his brain as to the possibilities of his future; but 'far from the madding crowd's ignoble strife,' he spent his quiet, humble life in his little log cabin, with his master to care for every want of self and family, in sickness and in health.

"It is an undisputed fact, known to our Southern people, that no race of men ever lived under better hygienic restraints or had governing their lives rules and regulations more conducive to physical health and mental repose. Their habits of life were regular, their food and clothing were substantial and sufficient, as a rule, and the edict of the master kept indoors at night and restrained them from promiscuous sexual indulgence and the baneful influences of the liquor saloon. In sickness he was promptly and properly cared for by physician and nurse. Freedom came to him and a change came over his entire life.

"In the light of the teachings of the last two decades, showing a marvelous increase of insanity among the Afro-Americans, and tyrannized, as I fear they henceforth will be, by an heredity from which they cannot escape, I confidently believe that in the near future the proportion of insanity among the negroes in the South will be as great, if not greater, than among the whites."—(Miller.)

WE call attention to the letter of Dr. Geo. M. Gould in this issue, which will interest contributors to medical journals. The spirit manifested by the publishing house there named is narrow and ungenerous and deserves an emphatic rebuke from a liberal and broad-minded profession. The writer of a medical paper which has, perhaps, been prepared with great care, or even expense, has an interest in it which does not cease with its publication; it is submitted to the medical press with the hope that it will secure the widest possible circulation, and medical writers will do well to offer their contributions to any of the other equally well-known publishing concerns which are not conducted upon such commercial and niggardly principles. The position taken by these publishers cannot be defended with a single respectable argument.

SELECTIONS AND ABSTRACTS.

THE MODERN TREATMENT OF DIPHTHERIA IN PRIVATE PRACTICE.

On the evening of September 14th, a little girl called at my office with a request that I should visit her sick brother. The public schools opened their doors on that day, and Johnny McD., although complaining of feeling sick, was sent to mingle with the hundreds of other school children.

An inspection of the case showed all the clinical symptoms of diphtheria, with a muco-purulent discharge from the nostrils so fetid that the odor filled the room. The examination completed, the mother anxiously inquired: "What is it?" "It is a case of diphtheria," I said; and her face blanched, her voice trembled as she said quietly: "I know what that means—I have buried two children with that."

On the 19th the father called at the office to say that Johnny could not be kept in bed, and they thought he was well.

In a skeleton way this illustrates the result of treatment with anti-diphtheritic serum, and stands in bold contrast with the drug treatment with the bottles of medicine, the cruel swab, the sleepless nights, the futile attempt to force food and medicine, the onset of secondary infection, and death or a tardy convalescence.

The uniform success which I have observed, and had in my own practice, has convinced me that the treatment of diphtheria with antitoxin is a great advance in therapeutics, and it is my impression that critics who have condemned this treatment have in most instances either observed only hospital patients, or have not persisted in the treatment, or perhaps have not had a fresh and reliable serum, or have not used it early enough.

From the standpoint of a general practitioner I confidently expect to cure any case of diphtheria in private practice seen within forty-eight hours of the onset of the disease.

Take, for instance, a typical case, a previously healthy child six years of age. The family physician is called in and finds the following conditions: general depression, face pale, pulse accelerated, temperature about 101° F. Inspection of throat shows general diffuse redness, with the characteristic deposit on one or both tonsils. This peculiar deposit once seen is not readily forgotten; the high fever, flushed face, and rapid pulse usually seen in pseudo-membranous tonsillitis are absent; the margin of the inflammatory process is usually sharply defined in diphtheria and not in tonsillitis. In follicular tonsillitis the leading symptoms are: intense congestion of the tonsils, with small discrete white patches, pulse and temperature high.

If, however, the symptoms are not well defined and the differential diagnosis cannot be clearly made, we should give the patient the benefit of the doubt and a dose of anti-diphtheritic serum administered at once. Then a culture should be made to verify the diagnosis. If I believe the case to be diphtheria, or have a reasonable doubt as to the diagnosis, I use the antitoxin whilst waiting for the report from the bacteriologist. If the case turns out to be tonsillitis, no harm has been done, as I consider a fresh, reliable serum, properly administered, devoid of danger.

Given, then, a case where the diagnosis of diphtheria is clear, I give as quickly as possible either 1000 units or 1500 units of the serum. The attendant is instructed to keep the throat clean with a bichloride solution of 1 to 5000; or a solution of permanganate of potash may be used, 1 to 400, if the attendant is not a trained nurse. With a young child difficult to manage, it is best to inject the solution into the nostrils; in older children a spray can be used in both the nostrils and throat more advantageously.

At the end of twenty-four hours I expect to find the membrane beginning to shrivel and curl up at the edges. In any event, however, I administer a second injection at this stage of the disease, and in a majority of instances this is sufficient. I advise very strongly that the second injection be given in all cases where the diagnosis of diphtheria is clear. I do not expect a cure from one injection, and rarely omit the second. If the symptoms do not indicate the beginning of convalescence at the end of forty-eight hours, I give a third injection. In fact, I would use a fourth injection if it seemed advisable at the end of another twenty-four hours, but I think this will rarely be found necessary.

I have not used anti-streptococcic serum, but I am convinced that in cases in which the treatment has been delayed, or in cases showing the streptococcic infection, proved by bacteriological investigation or from the peculiar red zone of inflammation which begins to spread from the margin of the diphtheritic process, the anti-streptococcic serum should promptly be used. Not only would I do this, but in cases of severe acute disease in the throat, which present all the symptoms of diphtheria, but where the bacteriological report does not confirm the diagnosis, I would resort to the anti-streptococcic serum. In fact, if I should have a case of diphtheria in which the membrane does not begin to peel up by the end of twenty-four hours, following, say the second injection of antitoxin, I will use the anti-streptococcic serum.

The importance of a fresh, reliable, highly concentrated serum must not be lost sight of; and as I have full confidence in our American product, I do not use imported serums. I have used several serums, but I have been best satisfied with the effects of that sent out from the biological department of Parke, Davis & Co. I heartily approve of the way this firm now puts up the serum in bulbs instead of bottles. It is not only highly concentrated, but, being hermetically sealed, should keep indefinitely. It is put up in bulbs of so many units, 250, 500, 1000, 1500; and each bulb being a dose, there is no temptation to use a serum that has been exposed to the atmosphere.

As to the medicinal treatment, I do not give any drug with the idea of influencing the course of the disease. I treat the conditions as they arise symptomatically. If I have evidence of the absorption of poisonous secretions, and a coated tongue, I give calomel tablet triturates, $\frac{1}{4}$ grain every hour, until the bowels move freely. Alcohol is rarely needed in cases receiving the serum treatment, especially if it is used early enough, whereas, under the old treatment, when we were so apt to find profound toxic symptoms, alcohol was more often needed. It is perhaps well to state here that I prefer fluid nourishment, principally milk, during the course of the disease.—W. A. WALKER, M.D., in *Pediatrics*.

HYDROZONE IN GASTRIC AND INTESTINAL DISORDERS.

A period of nearly twelve years has elapsed since I first began the clinical use of hydrogen dioxide, generally referred to at that time as the peroxide of hydrogen. In 1887 I published a paper giving a detailed account of several cases in which it had been employed by inhalation, but even then I was thirty years behind the report of Dr. (now Sir) Benjamin Ward Richardson, of London, who had made a thorough investigation of its antiseptic, detergent, and healing properties. Notwithstanding the fact that this preparation had been known to the medical profession for that length of time it had achieved little or no reputation. This, however, may be explained by the fact that the discovery preceded the dawn of bacteriology. Indeed, I was one of the early contributors to medical literature relating to the clinical value of this product, and since that time I have published a number of articles, embracing practically every application, both medical and surgical, to which hydrogen dioxide is adapted.

In the present communication it is my object to direct the attention of the profession to its special value in the treatment of gastric and intestinal disorders. In gastritis, for example, there is no antiseptic which can be given with so much benefit as this remedy, because its effect is immediate, and even in considerable doses it is absolutely harmless. The same is true in regard to its employment in typhoid fever, cholera infantum, and Asiatic cholera. In the latter disease its efficacy has been thoroughly demonstrated by a number of well known physicians, and its applicability in cholera infantum is well known to those physicians who have given careful attention to the most modern methods in the treatment of this class of cases.

The following brief notes will be sufficient to indicate the availability of this remedy in the treatment of the disorders already mentioned, although, in view of the fact that hydrozone is a more concentrated product, and withal a permanent solution, this latter remedy should have the preference. It contains at least double the volume of nascent oxygen, which has heretofore been the standard for the medicinal peroxide of hydrogen.

In gastritis, either acute, subacute, or chronic, we have to deal with an unhealthy condition of the lining membrane of the stomach. The inflammation is attended with an increased output of mucus, which seriously interferes with the normal functions of the peptic glands. By the introduction of a small quantity of hydrozone, in the strength of one part to thirty-two parts of boiled or sterilized water, this objectionable mucus is at once destroyed by the action of the oxygen which is released, and the contents of the stomach remaining are promptly discharged into the small intestine. A patient suffering from gastritis should take at least half an hour before meals from two to four ounces of diluted hydrozone (one to thirty-two), and lie on the right side so as to facilitate the action of the stomach in discharging its contents.* The antiseptic properties of the hydrozone thus used are sufficient to destroy the micro-organisms and leave the stomach in a healthy condition for the absorption of nutritive pabulum. All forms of fermentation are promptly subdued by the active oxidation resulting from the liberation of the nascent oxygen. The patient is then in a condition to take suitable food, which should be nutritious and easily digested, liquids being preferred until the active symptoms have subsided. Later, small portions of solid food can be ingested, but all foods of a starchy character must be thoroughly masticated, in order to secure the action of the salivary secretion upon the starch granules, breaking them up, and lessening the tendency to fermentation in the stomach. After taking a meal, a patient with gastritis should follow it with medicinal doses of glycozone, which contain, in addition to the nascent oxygen contained in hydrozone, a percentage of glycerin which favors osmosis and assists in re-establishing the functional activity of both the peptic and mucous glands of the organ.

In the treatment of cholera infantum, typhoid fever, and Asiatic cholera, the same general plan should be adopted in dealing with the stomach, always bearing in mind the necessity for having the patient remain in the recumbent position and on the right side for at least half an hour after the ingestion of the solution. In addition, however, to the preliminary treatment of the stomach, the same solution (one to thirty-two) is used as an injection into the lower bowel, care being exercised to insure its introduction as high up as possible. This can be managed by having the patient lie on the left side, with the hips well elevated, and the employment of a long, flexible rectal tube. In this manner we secure and maintain an antiseptic condition in both the stomach and large intestine, the importance of which will be understood when we consider the large number of micro-organisms which grow under these favorable conditions with such remarkable rapidity.

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* In chronic cases with a large amount of gastric mucus, and particularly in gastric ulcer, concentrated solutions are not well borne at first, owing to the formation of oxygen gas, but this difficulty disappears with the continued use of the remedy, and no treatment of gastric ulcer can be regarded as complete without the local employment of hydrozone.

When deemed advisable, the solution introduced into the lower bowel may be combined with large quantities of either hot or cold water, which enables us to obtain the benefits of irrigation in addition to the antiseptic effects. These irrigations may be employed as frequently as deemed advisable by the medical attendant, but they will usually prove satisfactory if administered at intervals of four hours.

Although brief, it is believed this communication will prove serviceable to a large number of practitioners who have hitherto found serious difficulties in counteracting the mephitic influences of bacteria in this class of disorders, and the clinical virtues of the remedy being now so fully recognized, no one will hesitate to adopt the methods suggested, which may be conveniently carried out, in addition to the usual routine treatment.—JOHN AULDE, M.D., in the *New York Medical Journal*, August 15, 1896.

THE TREATMENT OF QUINSY.

In any suggestions as to abortive measures, I recognize the fact that we do not usually see a quinsy patient until the disease has been progressing for twenty-four or more hours. To abort it at this stage is out of the question, in almost any case. We cannot claim for any medicinal remedy or combination a positive abortive effect in a case of quinsy.

In every case it is advisable to give a good mercurial cathartic followed by a saline. Unless we are reasonably positive of the presence of pus, when the case is first presented, I do not believe the use of the knife is advisable at that time. We must not provoke the inflammatory action by a too hasty attempt to relieve our patient by incision. We have all too often seen a veritable stabbing process performed in and about the tonsil, in the fruitless endeavor to locate the abcess. It appears to me this might usually be avoided by previously assuring ourselves with a careful differential diagnosis.

For many years the stereotyped line of prescribing had been quinine, opium, guaiacum, sodium salicylate, aconite and belladonna, either singly or in compound, as the opinion of the prescriber was guided by experience. I have no word of criticism for these. They were good, and doubtless afforded a vast relief in the aggregate. But as all things must change, and we tire, even of friends at times, so when improvements are made we must accept them as such. More recently salol has come into quite general favor.

From 1892, when I listened to Dr. Newcomb in his exhaustive paper on the treatment of tonsillitis medicinally, at the meeting of the American Medical Association in Detroit, until about one year and a half ago, I have felt that salol was the remedy *par excellence* for these cases. At that time three cases, all clerks in same department of one of our largest establishments, presented themselves at the same time. Two of them roomed together, the other lived with his parents. Such a coincidence at least suggested the possibility of contagion. A broken window on a cold, damp day was the presumable etiologic explanation. They were all suffering intense pain. Two of them had typical attacks of quinsy, the other tonsillitis. I used my usual applications, advised hot gargles and poultices, prescribing salol with rather confident promises of speedy relief. I had had two positive and two doubtful failures with salol in three years' experience previously, so that to find my patients growing worse for thirty-six hours did not entirely surprise me. Free incision was meanwhile made without obtaining pus, in either case of quinsy. The tonsillitis was further advanced, and was much relieved by the incision. In the other two I prescribed lactophenin, 10 grains every three hours; after the second dose Mr. B. was almost entirely relieved of pain; the temperature the following morning was 99.2°. The other symptoms were likewise very much ameliorated. In the case of Mr. R., the third dose relieved him quite as completely. At this visit I was able to thoroughly evacuate the pus and cleanse the cavity, affording the usual relief in such cases.

Since the above experience I have used the remedy in twelve cases of quinsy, and in all but one instance the results have been most gratifying to myself, and I am sure not less so to the patient. These patients have been first seen in all stages of the disease, from the first hour of the attack to the fourth day; and in one case, in consultation, on the sixth day.

The average time of relief has been about four hours. In all but three the relief was decided before the knife was used. In each of these three there were evidences of pus present, and the bistoury was used at once; so that the part played by the remedy is indeterminate.

I have in these cases given the lactophenin to the exclusion of every other remedy internally, excepting the cathartic already referred to; not omitting, however, the usual hot gargles and external applications.

My reasons for preferring it to salol are: Its action is decidedly more prompt; it has thus far given me no undesirable after-effects; it not only relives the pain but reduces the fever with an equal certainty. In cases of evident rheumatic diathesis I should certainly employ, in addition thereto, my customary remedies.—J. HOMER COULTER, M.D., in *Journal of the American Medical Association.*

EXCISION AND SKIN-GRAFTING FOR TUBERCULAR DISEASES OF THE SKIN.

My experience is limited to two cases, and these are naturally insufficient for the formation of an opinion as to the merit of the method. Given a localized tubercular lesion of the skin, of not too great area, the pathologic condition would seem to justify the suggested treatment. Actual metastases, as in "cancer," are not to be expected, neither do we anticipate such an insidious creeping along the lymphatic channels. We do have a localized inflammatory condition, with tubercular structure and usually few bacilli.

The ordinary treatment is slow and generally painful. In lupus vulgaris, especially, the scar often presents a recurrence of the disease. If we can, under thorough antisepsis and asepsis, totally remove the disease, without infection of the wound with the tubercle bacilli, and then by grafting minimize the resultant scar, we have a method superior to the old.

Surgeons and some dermatologists recognize the value of excision, but I believe the procedure unpopular with the majority of dermatologists. Thorough excision, with care not to re-infect the wound surface, followed by proper grafting, should enable us to end the treatment of a not too extensive case within two weeks. Ordinary methods, especially in lupus vulgaris, often occupy years. White, in advocating excision, says that the bacilli may finally find their way to vital organs if the local disease persist too long. Here it might be asked if the general tubercular condition certainly has its origin from the local lesion, or are not all the tissues, in cases ending thus, in so favorable a condition for the bacilli that they receive them just as easily through other channels?

My two cases were treated at my clinic at the Atlanta Medical College. The first was that of a mulatto girl, aged 15, with a history of suppurating tubercular glands in the neck for a year, which finally healed, about a year before the appearance five years ago of the disease upon the lip. The lesion was upon the surface of the left segment of the lower lip, being about the size of a silver quarter, occupying nearly half the thickness of the lip. It was an ordinary lupus vulgaris, with fine nodules, covered with thin scales, save in the center, which was crusted and papular. There was a marked, firm, red, raised border.

The patient was anesthetized, and as strict asepsis as practicable was employed. The button "point" of a Paquelin cautery at a dull red heat was used to cauterize the tissues diseased and kill the bacilli. The entire patch was then carefully dissected away, allowing sufficient margin of healthy tissue, and to the depth of about one-half the thickness of the lip. Small grafts were then taken from the previously prepared thigh and properly applied. About 80 per cent. of these lived. A few more grafts were applied two weeks later to points left vacant by the slipping of some of the first. The success of the treatment was vitiated by some error in asepsis in later dressings. After some weeks a faint vesicular point was noticed at the inner edge of the healed surface, but this soon disappeared spontaneously. There was also a tendency to keloidal growth of the cicatrix, but secondary contraction soon relieved it.

My second case was that of a white boy of 12 years, in a poor general condition. Occupying the dorsum of the right wrist was an oblong, transverse, flabby, irregular ulcer, with an unhealthy base and soft, indolent, pale, undermined edges—in short, the lesion formerly described as a scrofuloderm. I believe the duration of the disease was over a year.

Under anesthesia and with asepsis, a free incision, well outside the margins of the lesion, ovally, without lifting the knife, was carried around the diseased tissues. A clean dissection was then made from the annular ligament, care being had not to allow the lesion, or anything which had been in contact with it, to touch the wound. Large grafts were shaven from the skin of the thigh and applied in the usual manner. The grafting was a failure, but a good, flexible scar was obtained. In addition to the usual dressings, a splint was used to restrain motion.

Inability to see or hear from my patients directly prevents my reporting their present condition. The first case seemed cured when seen two or three months after her discharge; the second is said to have had a "recurrence" in the scar.

My two cases simply demonstrate what I believe to be the proper method of operation, while they also constitute a warning as to the absolute necessity of thorough asepsis both at the operation and in the after-dressings. The second case also needed considerable preparatory treatment, which our haste to operate too often causes us to neglect. Excision without grafting is not so promising as the two combined, but perfect technique and extreme care in the later dressings would obviate much of the danger of future trouble in the cicatrix. We hope with grafting to get a minimum of granulation, and, later, scar tissue, which offers a minimum of liability to recurrence.

The cutaneous tuberculoses being now classed in one group, we can well generalize in their discussion, with a special allowance for the marked tendency of lupus vulgaris to return in its scar tissue.

NOTE.—The lupus patient was seen a few months after this paper was read. A young brother had died of tuberculosis meanwhile. The site of operation showed entire cure of the lupus. The cicatrix was still a little nodular and pigmented, though smoothing and whitening at edges. The fine hair included in grafts from leg had become long and coarse. She declined their removal by electrolysis. The final result in this case is satisfactory.

—DR. M. B. HUTCHINS, in *Jour. Am. Med. Assn.*, Dec. 12, '96.

RECENT PROGRESS IN THE KNOWLEDGE OF HEREDITARY SYPHILIS.

It has not yet been demonstrated that syphilis is of bacterial origin, but our knowledge of this far-reaching infection has been greatly amplified and modified by clinical and pathological discoveries, which have been made while studying the nature and course of other infectious diseases. It is now definitely known that in many cases there is an intimate association of symbiosis of many morbid states and conditions, and that syphilis pathologically modifies other morbid conditions. In its turn, its pathological developments may in like manner be acted upon by other diseases. These facts have been well presented in a short essay on hereditary syphilis and tuberculosis by Hochsinger, which will undoubtedly lead, in time, to a revision and recasting of all our knowledge of the pathological anatomy of inherited syphilis. He gives the history of three cases in which the symbiosis of syphilis and tuberculosis was positively proved, and these histories quite clearly show that the latter infection was the predominating one. Had not these cases been so thoroughly studied, both histologically and bacteriologically, they would, like many thousands before them, have been incontinently set down as typical examples of heredity with visceral lesions.

As a result of these studies and observations, Hochsinger concludes that a mixed infection of hereditary syphilis and tuberculosis may be found in the very youngest children, and that thus a double infection may be simultaneously transmitted at conception. These observations also show that all nodules, caseous or otherwise, found in hereditary syphilitic infants should not be pronounced to be syphilitic gummata until it is shown that they do not contain the tubercular bacillus. In hereditary syphilitic pneumonia there is true interstitial granulation-tissue infiltration, with perivascular cell-proliferation into the lung-parenchyma, and no tubercular bacilli.

The foregoing considerations very clearly emphasize the facts that in many bad cases of hereditary syphilis there is, in all probability, a synchronous tubercular infection, and that no nodules found in the viscera, and, indeed, we may add, in the bones, joints, and skin of these subjects, should be pronounced to be gummata until the influence of tuberculosis has been excluded. Diagnoses which are based on microscopical appearances are not reliable, since to the eyes the lesions of syphilis very often resemble those of tuberculosis in a striking manner. In some nodules there has been found evidence of the action of both syphilis and tuberculosis.

In earlier days we were accustomed to speak of the cause of death of infants and children hereditarily syphilitic as due to congenital want of vitality, particularly when, at the autopsy, we found no visible involvement of an important organ. Pavloff (*Annals de Dermat. et de Syphiligraph*, July, 1895) concludes that vessel-changes are the cause of death of most hereditarily syphilitic children, and he makes the pertinent suggestion that this extensively distributed morbid condition indicates the great necessity of a general systematic treatment. It is important, in this connection, to remember that Mracek found in the viscera of eighteen hereditarily syphilitic children hemorrhages of such severity that they constituted the active cause of death. As bearing upon Pavloff's conclusions, Bar and Tissier, at the autopsy of a child at term, whose parents were the victims of active syphilis, found pathological changes in the veins and arteries throughout the entire body.

The histories of cases reported by Murri, Schumacher, and Gœtze have shown that there is a probable etiological relation between acquired syphilis in some subjects and paroxysmal hemoglobinuria. Recent observations seem to show that the morbid combination may occur in the course of hereditary syphilis. Courtois-Suffit (*Médecine Moderne*, March 2, 1895) reports the case of a four-year old child born of syphilitic parents, presenting characteristic lesions of the tibia, who, during two years (third and fourth of life), suffered from attacks of hemoglobinuria, at first when exposed to severe cold, and later on even when the temperature was not low. Treatment by mercurial inunctions and the ingestion of potassium iodid caused improvement in the osseous lesions and allowed the child to escape any attacks of hemoglobinuria during a severe winter. Comby, in a later communication (*Ibid.*, March 6, 1895), claims that he had previously pointed out this symptom as being etiologically related to hereditary syphilis. Gœtze reported the case of a child, nine years old, who presented structural evidences of hereditary syphilis, but whose medical history was unknown, who suffered from hemoglobinuria. The study of this interesting question has only just begun, it being yet in the stage of case-reports.

A like condition prevails as to the clinical history and the pathology of the changes and disorders of the kidneys in hereditary syphilis. Hoch details the case of a typical syphilitic infant, three months old, in which, while favoring the view that the nephritis was caused by syphilis, he suggests that perhaps it was due to the action of mercurials. In this case the hiatus consists in the absence of an autopsy and of histological findings.

In a case reported by Massalongo, we find more satisfactory data (*Arch. per Scienze Mediche*, lx. and ii., 1895); the infant was six months old, born of a syphilitic mother, and it presented typical lesions. Before death it suffered from albuminuria, edema, convulsions, and uremic coma. Histological examination of the kidneys showed well-marked changes in the arteries—endarteritis and periarteritis—and thromboses, extensive and interstitial nephritis, and great increase in the connective tissue, which compressed the glomeruli and produced schlerosis of the organ. The lesions resembled those of late nephritis in acquired syphilis of adults. Massalongo thinks that these visceral changes began in intrauterine life.

With the expansion of our knowledge of syphilis as a chronic infectious disease, it seems that many surprises are in store for us. Cases reported by Hutchinson, D'Ornellas, Morgan, Elsenberg, and myself, have shown very clearly that Raynaud's and Morvan's diseases may occur in the course of acquired syphilis, and that the latter infectious process is, in all probability, etiologically related to them. Krisowski (*Jahrbuch f. Kinderheilkunde*, vol. xi., pp. 57 *et seq.*) described a well-observed case of hereditary syphilis, in which symmetrical gangrene was a prominent symptom. Under mercurial inunctions and the internal use of potassium iodid a cure was promptly brought about. Here, then, is another subject for study in the protean drama of hereditary syphilis.—TAYLOR, *Medical News.—Polyclinic.*

TREATMENT OF SYPHILODERMATA.

A careful consideration and trial of the various methods of treating the syphilodermata has led me to the following conclusion:

1. In the primary stage, when only the chancre is present, no general treatment; calomel locally.

2. As soon as the secondary period sets in, as shown by the general adenopathy, angina, cephalalgia, and eruption, the internal treatment for mild cases should be ¼ to ¾ of a grain of the protoiodide of mercury t. d., continued for three months, or until the symptoms disappear. In severer cases, with pustular eruptions, severe anginas, persistent headaches, etc., a course of 6 to 10 intramuscular injections of 10 per cent. calomel-albolene suspension, 5 to 10 minims at intervals of five to fifteen days, should be employed.

3. After completion of the course and cessation of the symptoms, employ tonics, etc., without specific treatment, for three months.

4. Thereupon a second calomel course as above, plus a small dose (15 grains) of iodide of potassium in milk after meals. This to be given whether later secondary symptoms of the skin and mucosæ appear or not.

5. Second intermission of treatment, lasting three to six months, according to the presence or absence of symptoms.

6. In the second year, if tertiary lesions marked by deeper and more localized ulceration are present, give the iodide of potassium in increasing doses (60 to 600 grains daily) as may be necessary. Combine with it occasional courses of calomel injections. If no lesions appear, give a mild course of both.

The best local treatment of the syphilodermata is with the mercurial plaster-mull.—Dr. W. S. GOTTHEIL, abstract of lecture at New York School of Clinical Medicine.

A GARGLE FOR FOLLICULAR AMYGDALITIS.

Levy (*Semaine medicale,* September 23, 1896; *Weiner klinische Rundschau,* October 11, 1896) recommends the following:

℞	Creosote	8 drops.
	Tincture of myrrh, Glycerin, each	900 grains.
	Distilled water	1,800 grains.
M.		

—*N. Y. Med. Journal.*

THE APPENDIX AND GRAPE SEEDS.

Dr. Edmund Andrews, of Chicago, believes (*Jour. Am. Med. Association*) that:

1. The appendix is not a "functionless" organ. It produces every day a quantity of tenacious mucus to lubricate the cecum, and by thus facilitating the fecal movement prevents impaction in the head of the colon.

2. The current of this tough mucus is toward the gut, hence seeds and other foreign bodies cannot enter the appendix in opposition to the movement as long as the organ is in a healthy condition.

3. From various causes perforations may occur in the appendix. The current of mucus is then reversed and flows outward, and small bodies in the colon may thus be drawn into the appendix, or even carried through it into the abscess or the peritoneum without being the cause of the perforation.

4. There is no scientific proof that grape seeds are any more dangerous than the hundreds of other small objects which we daily swallow with our food.

THE TREATMENT OF ACUTE OTITIS MEDIA AND SUPPURATIVE MASTOIDITIS.

Hessler states (*Am. Jour. Med. Sci.*) that in acute otitis media with imperforate membrane he makes a large curvilinear incision in the membrane, extending from its anterior border beneath the malleus to the middle of its posterior periphery. In all acute cases he strictly forbids syringing, but advises a patient to mop the ear gently with cotton wool as often as is required. Cotton wool should not, however, be worn in the ear. Inflation of the tympana in the acute stages is strictly forbidden, as this procedure may produce further inflammation by infection from the nasopharynx. Should secondary mastoid inflammation supervene, operation by Schwartze's method is recommended. The resulting wound should not be irrigated, but simply tamponned with iodoform gauze.

In the discussion which followed the reading of this paper, Panse (Dresden) remarked that patients should not be allowed to mop their own ears with cotton wool. He places strips of iodoform gauze in the auditory canal in cases of acute discharge, allowing the secretion to run into a bandage, which is changed as often as is necessary.

Stacke (Erfurt) stated that in acute suppurations he avoided not only syringing, but did not allow the patient to assist in any way in the treatment.

Leutert (Halle) advised no syringing, but that the external meatus be kept closed, in order to prevent entrance of air.

Brieger (Breslau) favored dry cleansing with sterilized cotton wool.

Hartman (Berlin) said that he did not employ inflation in acute cases, nor irrigation of the wound after mastoid chiselling.

Reinhard (Duisburg) also spoke against irrigation in acute cases.

Walb (Bonn) avoids inflation or the use of the catheter for fear of forcing pus into parts previously unaffected.—*Med. Chronicle.*

THE ABUSE OF THE STIGMATA OF DEGENERACY.

In that late entertaining book, "Over the Hookah," by Dr. Frank Lydston, of Chicago, the "talkative doctor" sounds an important word of warning respecting the use, or rather abuse, of the stigmata of degeneracy in certain expert testimony:

"'The modern school of criminal anthropology has accomplished much, but it does not claim to have established as yet, any data that warrant our making the stigmata of degeneracy an important issue in murder trials. But dabblers and pretenders infest every art and science, and we must console ourselves with the reflection that such persons by no means represent scientific thought. . . . The worst feature of such notoriety-seeking fellows is that they drag 'star-eyed science' in the mire and make it an object of ridicule and distrust. The so-called science of phrenology, absurd as it is, was never half so ridiculous as the sham science that certain camp-followers in the field of criminal anthropology and the study of abnormal man are endeavoring to set up. . . . Modern science holds, not that certain peculiarities of development necessarily indicate a particular type, or indeed, any type, of insanity or criminality, but that the criminal and the insane are characterized on the average by aberrations of cranial development and certain other departures from the normal average standard, that we term stigmata of degeneracy—a wide distinction, and a still wider difference. To be sure, there are extreme types of atypical cranial development that are associated with certain peculiar mental attributes, but not with sufficient frequency to form a basis for dogmatic expert evidence. . . . I do not deny that there is something suggestive in cranial conformation—we hope there may yet be more—but it is best to be very conservative in our judgment on this point. Lombroso and his school have taught us much, but let us not claim more than our masters. Science sometimes has need to cry 'Save me from my friends.'"

HOW TO WRITE A MEDICAL PAPER.

Dr. W. P. Northrup, of New York, has made the following suggestions as to medical writing, with which all editors will agree heartily:

Scratch out your introduction and begin where the subject really begins. Condense the body of the paper. End the paper where the subject ends. Successful papers, almost without exception, are those written with one definite and predominating thought, on which every fact is brought to bear and toward which every argument is directed. Conclusions alone are, as a rule, sufficient, with pertinent facts so marshaled as to give them proper support. The various minute details of the stages by which these conclusions are reached are usually uninteresting, and had better be touched on lightly or omitted entirely. An expert editor, by remorselessly stripping away the padding, is usually able to make an abstract that will present all the author's ideas and conclusions in one-fourth the space of the original paper.

Many a man who has had something of real value to say has first smothered the life out of it with padding, and then dug a grave and buried it in the midst of a five-column paper compiled from some text-book. It would be far better for professional literature if every man would content himself with writing what he really knows, instead of writing what he has only read. One new fact discovered, one new, live, practical idea, is a sufficient subject for one paper, though it may be a short one. Two or three subjects for a single paper will render it weak or actually inert. A shot-gun is adapted to small game, but large game is only brought down with a rifle. A single paper on a live subject, if it hits the mark squarely, will do more to establish a man's reputation than ten diluted and watery compilations.

SOME GOOD EXPECTORANTS AND COUGH REMEDIES.

The following formulæ have been thoroughly tested by Dr. James K. Crook, of New York, in hospital and private practice, and may be trusted to render good service in properly selected cases:

1. For irritative coughs: ℞ Phenacetin, 20 to 40 grains; ext. glycyrrhizæ, 20 grains; sacch. albi, 2 drachms. Fiat pulvis, in chartulas xx. dividendus. Sig.: One to be taken at one, two, or three hour intervals.

2. When an expectorant effect is desired: ℞ Extracti glycyrrhizæ, 20 grains; phenacetin, 20 to 40 grains; ammonii muriatis, 1 to 2 drachms; sacch. albi, 2 drachms. M. et in chart. xx. div. Sig.: One powder to be taken in a little water every two, three, or four hours.

3. A good stimulating expectorant for adults: ℞ Apomorph. hydrochloratis, 1 grain; syr. ipecacuanhæ, 2 fluidrachms; syr. tolutani, 1 fluidounce; aquæ dest., q. s. ad. 3 fluidounces. Ft. mist. A teaspoonful five times daily at four-hour intervals. Shake well before using. Prepare freshly as required and keep in a dark-colored bottle.

4. A good stimulating expectorant for every-day bronchial and phthisical coughs: ℞ Ammonii muriatis, 2 drachms; tincturæ opii camphoratæ, spiritus chloroformi, syr. ipecacuanhæ, āā 2 fluidrachms; syr. prun. Virginianæ, q. s. ad. 3 fluidounces. M. Sig.: A teaspoonful every three or four hours. Shake well before using.

5. For weak and fruitless coughs with loss of bronchial power: ℞ Ammon. carbonatis, 1 to 2 drachms; tinct. tolutani, 2 fluidrachms; syr. senegæ, spiritus vini gallici, syr. simplicis, āā 4 fluidrachms; aquæ dest., q. s. ad. 3 fluidounces. Ft. mist. Sig.: A teaspoonful in a little water every two, three, or four hours.

6. For asthmatic and emphysematous coughs: ℞ Spiritus ætheris compositi, 4 fluidrachms; potassii iodidi, ammon. muriatis, āā 2 fluidrachms; codeinæ sulphatis, 2 grains; syr. tolutani, 4 fluidrachms; aquæ dest., q. s. ad. 3 fluidounces. M. Sig.: A teaspoonful every two, three, or four hours.

7. For recurring bronchitis or winter cough: ℞ Terebene, 6 fluidrachms; ol. eucalypt., 2 fluidrachms. M. Sig.: Ten to fifteen drops on a little sugar every three or four hours.—*Medical Record.*

EFFECT OF THE X RAYS UPON THE SKIN.

The editor of the *Journal of the American Medical Association* mentions this matter in his issue of December 12, 1896. He refers to a case reported by Dr. King (*Canadian Practitioner*, November, 1896) of an operator and exhibitor who was exposed to the rays for many hours a day for some weeks. Dermatitis, "other alterations in the skin," destruction of hair and nails—and conjunctivitis occurred. This case, as also Dr. Skinner's (*Jour. Am. Med. Assn.*, November 14), presented some of the symptoms of sun-burn, but other symptoms were rather peculiar.

Of course, as the editor says, these effects would not follow ordinary (necessary) and moderate exposure. The effect upon show people does not interfere with the scientific use of the rays. H.

TREATMENT OF LUPUS VULGARIS BY MEANS OF ELECTROLYSIS.

Dr. A. Ravogli, of Cincinnati, read a paper upon this subject at the last meeting of the American Medical Association (published in *Jour. Am. Med. Assn.* Dec. 5, '96). He reviews the various methods of treatment, and mentions those who have used somewhat the same method as followed by himself. In the case reported he used a needle attached to the negative pole, and employed a current-strength of ten to twelve milliamperes. The needle was inserted deeply in the lupus nodules and the current allowed to pass for a minute or longer. He says the entire nodule is thus destroyed. He obtained perfect success in five weeks in his case, which involved the nose, lips, and cheeks.

Dr. Ravogli's method promises some advantages over the caustic and other plans of treatment, though—as was objected at the time his paper was read—ten to twelve m. a. produces an actual caustic effect, or one indistinguishable from a caustic effect. H.

UNGUENTS FOR INSECT BITES.

Brocq suggests the following preparations for the bites of fleas, gnats, and bugs:

1. Camphorated chamomile oil, 100 grams; balsam of storax, pur. 20; essence of peppermint, 5 gr.

2. Olive oil, 20 gr.; ointment of storax, 25 gr.; balsam of Peru, 5 gr.

3. Naphthol, 5 to 10 grams; ether, q. s. to dis.; menthol 0.25 c. to 1 gram.; vaselin 100 grams.—*Jour. de Méd. de Paris*, October 18.—*Jour. Am. Med. Assn.*

MEDICAL ITEMS.

A HAPPY NEW YEAR to all our readers, and, in the words of Tiny Tim, may God be with you, every one!

THE New Orleans University Medical School is preparing to establish a training school for colored nurses. The movement deserves to succeed.

PERHAPS A MISPRINT.—The local paper, speaking of a street accident, said: "Dr. Jones was quickly summoned, who, after examining the patient's purse, decided that the case was hopeless."—*Ex.*

FOLLOWING are the officers of the Atlanta Society of Medicine for 1897: President, Dr. George H. Noble; Vice-President, Dr. L. H. Jones; Secretary, Dr. L. H. Hancock; Treasurer, Dr. L. B. Grandy.

THE New York Polyclinic building was completely destroyed by fire on the morning of December 25th. Arrangements will doubtless be made for continuing the lectures and clinics in other quarters.

THE Cleveland (Ohio) *Medical Gazette* comes out for November enlarged and greatly improved. We congratulate our valued contemporary upon beginning its twelfth volume with such evidences of good health and prosperity. May they never grow less.

ANY of our readers who may desire an up-to-date cautery for office work will do well to write to the Carter Manufacturing Company, Louisville. Their Transformers for the electric light current are things of beauty as well as of service. See advertisement.

DR. C. DUNBAR ROY, of Atlanta, and Miss Carrie Ellett, of Richmond, were married December 16th. After their bridal journey in the North the happy couple returned to Atlanta, December 28th. THE JOURNAL offers best wishes for a long and happy life.

WE recognize in the last *Canadian Practitioner* two of our late editorials without any acknowledgment for the same. We are pleased to have our brother *Practitioner* use our matter, and only ask that proper credit be made for it. Don't let this happen again, brother.

A CODE of medical ethics three hundred years ago: "To travaille in this our vocation and arte, truely, rightly and without deceit, so that it may be to the glory of God, to the common welth, and our further knowledge, and finally to the health and safeguard of the people."—*Thomas Gale.*

THE *American Medico-Surgical Bulletin,* after January 1st, will be issued as a semi-monthly. The late editor, Dr. W. H. Porter, has been succeeded by Dr. R. G. Eccles. The *Bulletin* has come to be one of the best of our exchanges and a popular journal with physicians. We wish it continued success.

AT a surgical clinic a few days ago, before a class in the Harvard Medical School, a patient was shown who had a wound on the thigh caused by the bite of a rat. The instructor having asked the class for a diagnosis of the case, one of the students replied promptly, "rodent ulcer."—*Boston Med. and Surg. Journal.*

NIGHT-WORK is a much exaggerated evil of the physician's life. In the first few years of city practice there is not a superabundance of either day or night calls, and to one who falls asleep full of apprehensions as to the success of the future, the jingle of the telephone breaks in upon his troubled dreams like sweet music.—A. L. BENEDICT, in December *Lippincott's*.

Mrs. Goldstein (to ill Mr. G.): Isaac, der doctor say dot if you vould be cheerful und haf some gonfidence in him, dot vould be half der cure.

Mr. G.: Vell, if I do dot, vould he make a fifty per cent. reduction in der bill?—*Puck*.

THE Ware County (Georgia) Medical Society was organized last month at Waycross by Drs. J. L. Walker, J. L. Dedge, N. C. Berry, J. B. Bagley, G. P. Folks, T. J. Fales, J. J. Jones, A. P. English, N. A. Frier, R. P. Izlar. The following officers were elected: J. L. Walker, president; J. J. Jones, vice-president; A. P. English, treasurer; R. P. Izlar, secretary. We will be pleased to have the society make use of our pages for their proceedings.

R. M. W., in *Journal of American Medical Association*, wants to know the author of the following lines:

> "God and the doctor we alike adore,
> But only when in trouble, not before.
> The trouble o'er, both are alike requited;
> God is forgotten and the doctor slighted."

We pass.—*Texas Med. Journal*.

We turn it down.

A JOURNAL that gladdens the heart and delights the understanding every month is the *Texas Medical*, otherwise known as the *Redback*. As Chimmie Fadden would say, *it is up to de limit*. Standing for the ethical in both medicine and journalism, it is the uncompromising foe to the medical pretender and adventurer. It is a joy to its friends and a terror to its enemies; *suaviter in modo, fortiter in re*. There is but one *Texas Medical Journal*, and Brother

Daniel is the editor thereof. May its vigor never perish nor its complexion fade!

MR. W. B. SAUNDERS, of Philadelphia, the well known publisher of standard medical works, has in press a large work entitled "Anomalies and Curiosities of Medicine," by Dr. George M. Gould and Dr. Walter L. Pyle. It is an encyclopedic collection of rare and extraordinary cases, and of the most striking instances of abnormality in all branches of medicine and surgery, derived from an exhaustive research of medical literature from its origin to the present day. It will form a handsome octavo volume of 968 pages, with 295 illustrations in the text and twelve half-tone and colored plates. Ready in January.

THE meeting of the Southern Section of the American Laryngological, Rhinological, and Otological Society will be held in New Orleans, March 3d and 4th, 1897. This date has been selected, as it will permit visiting members to see New Orleans during the Carnival season, and will enable them to secure half-rate railroad transportation.

A meeting of a laryngological, rhinological, and otological society in the South is a distinctly new enterprise, and should be encouraged. With the active co-operation of the physicians interested in this work, the Carnival meeting of the Southern Section of the American Laryngological, Rhinological, and Otological Society will be an assured success.

Candidates for membership should send their names, properly indorsed, to Dr. Robert C. Myles, Secretary, 46 West 38th St., New York, or to Dr. W. Scheppegrell, Medical Building, New Orleans, so that they may be acted upon by the Council of the Society.

BOOK REVIEWS.

REFERENCE-BOOK OF PRACTICAL THERAPEUTICS. By various authors. Edited by Frank P. Foster, M.D., editor of the *New York Medical Journal* and of Foster's Encyclopedic Dictionary. In two volumes. D. Appleton & Company, New York. Vol. I. pp. 652.

The first volume of this handbook, which has just appeared, has been written by over thirty well-known American authorities on therapeutics. The range of the book is not limited to the action of "drugs," but includes curative measures of all descriptions outside of surgical methods, such as the use of diets, exercise, massage, climate, heat and cold, hydriatics, electricity, condensed and rarefied air, etc. The trade names of chemical combinations used in medicine are also given. Each subject is treated according to its importance; and may be found quickly on account of the alphabetical arrangement and prominent type of the headings.

For the busy practitioner especially who desires to have at hand a full and correct account of all known therapeutical methods and the most recent drugs, this book will certainly prove an important contribution to his library. The authors are to be congratulated on the appearance of this volume, and the publishers have most satisfactorily done their part. A. W. S.

WE acknowledge receipt from Dr. J. T. Eskridge, Denver, Colorado, of brochure containing a "Series of Articles on Speech-Defects as Localizing Symptoms, from a Study of Six Cases of Aphasia," reprinted from the *Medical News*, June 6th to September 19th, 1896. The cases make a very interesting collection of brain lesions, with a careful description of the symptoms and treatment in each case. It is an instructive contribution to the cerebral localization of certain functions, which will be of special interest to the neurologist and brain-surgeon.

ATLANTA

Medical and Surgical Journal.

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ORIGINAL COMMUNICATIONS.

THE RELATION OF THE RHEUMATIC DIATHESIS TO THE COMMON THROAT INFLAMMATIONS.*

BY JAMES EDWARD NEWCOMB, M.D.,

Attending Laryngologist to Demilt Dispensary and to the Out-Patient Department of Roosevelt Hospital, New York City; Fellow American Laryngological Association.

This topic is one of interest alike to the general and to the special practitioner, and as it has never been discussed before this society, it occurred to me that its consideration this evening might not be without profit to us. The time at my disposal forbids more than an outline of some of the many aspects the topic assumes.

A diathesis is defined as a congenital or acquired condition predisposing to some particular constitutional disease or to certain local manifestations of disease. In the case of rheumatism it is impossible to give, even at the present time, with all the advance in medical knowledge, a satisfactory definition. We do not yet know the full range of its causative factors. In a general way it may be said to be due to the formation of some toxic material within the body or to inadequate elimination of some such material. Regarding the exact nature of the disease numerous theories are extant. Maclagan has referred its cause to the entrance into the body of some miasm from without; Recklinghausen and Klebs to a micro-organism entering the system and acting specifically on the fibro-serous structures as does small-pox on the skin. Heuter particularized this view, maintaining that the definite channels of entrance for the germ were the orifices of the ducts of the sweat-glands. Through the latter they were conveyed to the blood and caused an endocarditis. The joint lesions were the result of infectious emboli incident to the cardiac condition. Latham found the starting point of the malady in the hyper-oxidation of muscular tissue. The lactic acid theory of Prout is too well known to deserve more than mention. It is by no means universally accepted. The neurosal theory of Mitchell has had able advocates, and it is interesting to note that no less an authority than Jonathan Hutchinson regards rheumatism as a catarrhal neurosis, the exposure to cold and irritation of some area of skin or mucous membrane acting as the exciting factor. Still more recently, Riva has declared the pneumococcus of Fränkel to be the *materies morbi.* He regards not only endocarditis and pericarditis as rheumatic manifestations, but also pneumonia, pleurisy, cerebro-spinal meningitis, diplococcic septicemia with localizations, and every other infection, either local or general, produced by the above named organism.

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*Paper read before the West End Medical Society of New York City, October, 1896.

Whatever elements of truth there may be in these various propositions, the exciting cause of rheumatism finds, by common consent, its origin in a perversion of the processes of assimilation and excretion, resulting in the formation of some unknown intermediate product or products of destructive metamorphosis. During the existence of such a condition, cold, the great exciting factor, acts directly upon either the vaso-motor or trophic nerves of the articulations, or else on the corresponding nerve centers through an influence on the centripetal nerve fibers.

In nearly every text-book on rheumatism the definition of the disease is usually followed by the statement that it is often associated with affections of the tonsils and pharynx. The relative frequency of this association is variously estimated by different authors. It is of some interest to note in passing that this matter has been seriously considered only during the last twenty-five years, though mentioned ten years before that era by Desnos, and in 1868 by Trousseau. In the latter year Lennox Browne boldly stated that the predisposing causes of rheumatism and tonsillitis were identical. In the last edition of his Treatise (1893) he practically reaffirms this view, holding that the dartrous or arthritic diathesis invariably exists in those patients subject to recurrent attacks of acute tonsillitis. In 1887 Haig Broun published notes of 345 cases of common throat inflammations, in 33 of which peri- and endo-cardial complications supervened without any antecedent rheumatic history; again in 1888 notes of 119 cases, 28 of them having rheumatic pains, 38 rheumatism and 10 rheumatic parents; that is, 64 per cent. of the whole number had some rheumatic tendency.

Fowler believes that careful inquiry will show that 80 per cent. of all cases of rheumatism have had previous sore throats.

Humphreys, in a group of some 240 cases of illness in 160 different patients, found 39 of acute or sub-acute rheumatism, 78 of tonsillitis and 138 of pharyngitis, while the balance closely resembled acute rheumatism in their signs and symptoms, including some cases of erythema and urticaria.

Knox has published a report of fifty cases of quinsy, in forty-five of which a distinct history of rheumatism was found, and in all of which the alkaline salicylates proved a specific in treatment.

Bean considers the rheumatic diathesis as the most important factor in the etiology of quinsy, and states as his personal experience that in fully 70 per cent. of his cases has there been a decided rheumatic history.

J. Solis-Cohen holds that tonsillitis may be rheumatic or non-rheumatic, and that for therapeutic purposes a distinction between these two forms is most important.

Now, on the other hand, Wm. Osler affirms that it is not in line with his experience to find any connection whatever between rheumatism and tonsillitis except that acute rheumatism is not infrequently preceded by inflammation of the tonsils. Mackenzie, Strumpell and Sajous, while casually admitting that a rheumatic diathesis may be the cause of a tonsillitis, broadly assign atmospheric influences as the more prominent feature in the cause of the disease. Max Thorner, in his etiology of quinsy, gives the disease a bacterial origin and discredits entirely the rheumatic theory, though he admits that the rheumatic virus may have an irritative action upon the throat in the production of what he fully describes as "rheumatic pharyngitis."

The foregoing quotations fairly represent the pros and cons of this mooted question.

Under such circumstances, where authorities of equal weight are arrayed against each other, one's convictions are naturally based upon his own experiences. For some years I have made it a routine to inquire into the family and antecedent personal history of all cases of acute sore throat with reference to rheumatism or any of its definite manifestations. Out of 586 patients questioned along this line, 154, or 26.2 per cent., presented either family or previous personal rheumatic trouble, while 432, or 73.8 per cent., were entirely free therefrom.

From this personal experience I am led to believe that the frequency of the rheumatic element in the common throat affections has been much overestimated. On the other hand, I well realize the unreliability of statistics collected in this manner, on account of two main reasons:

1. Patients are, as a rule, not accurate observers of their own symptoms, and are apt to respond too readily to leading questions so that we are able to draw out from them almost any statement we desire. The advocate of a favorite theory in medicine is always exposed to the danger of forgetting that he is really the judge of the case, and not the attorney either for the prosecution or defense.

2. Rheumatism is, as we all know, a composite disease. By no means are all of its features outlined in the portraiture of a single case. This is indeed true of all diseases, but it is notoriously manifest in rheumatism. Not only the joint lesions, but disturbances of the heart—itself called a "joint" by the great Louis—the nervous system, etc., all are the outposts where the advance guard of

the enemy first gives battle. In regard to a chorea, Dyce Duckworth is quoted as saying that it is simply another variety of rheumatism in which the brain is affected instead of the joints, and he commends Sir Andrew Clark's definition of chorea as "Rheumatism of the Brain."

This fact is simply mentioned as suggestive of the care with which our questions should be propounded and the wide field they must cover in order to find out whether our patients have really had rheumatism or not.

Now, for our practical purpose, the great question is: How shall we decide whether a given case of throat trouble has an underlying rheumatic cause? Three phases of each case require consideration: The pathological, the clinical, and the therapeutical.

To take up the latter first, it is frequently found that the common throat affections yield to the alkalies and the salicylates, but here again are occasions for many deductions. These maladies are generally self-limited and stop in from 4 to 6 days without any treatment. In fact, much of our boasted success with any class of remedies, is confined to making the attack tolerable for the patient while not at all shortening its duration. If we begin our anti-rheumatic treatment on the fourth day, and the patient is well on the sixth, our remedies cannot, from that fact alone, be credited with any abortive power whatever. We should compare groups of parallel cases, contrasting those treated with those not treated; then again, the results in cases with a rheumatic history with results in those without such history. In my own cases, the therapeutical results have been the same in both classes of cases, So that, while not denying the truth of the main proposition of this paper, I think that a verdict of "cause and effect" is frequently rendered where one of "coincidence" would be nearer the truth.

As regards the clinical aspect, we may lay down the following rules to guide us in determining whether a given case is or is not of a rheumatic nature:

1. The exclusion of other manifest causative factors.
2. An antecedent personal rheumatic history.
3. A severity of local in comparison with general symptoms.

The pains in the back of the neck so often regarded as proof of rheumatic infection, are not necessarily so, for in many cases of sore throat, there is a mild septic infection from the absorption either of pus or of other toxic material, and to such infection the pains are frequently due.

The rheumatic cases generally begin with intense pain or deglutition, while the throat is but slightly congested. The saliva accumulates from the patient's unwillingness to swallow. The pain is frequently referred to the top of the esophagus. Respiration may also be painful and phonation excessively so. As the discomfort subsides, muscular soreness is felt in neck and loins. The joints stiffen up, but pain in them, as well as swelling and redness, is frequently wanting. The pain is apt to be more severe on the side of the body corresponding to the affected tonsil. It may shift from one tonsil to the other. Of course many cases of angina are followed by polyarthritis. In certain patients this follows so regularly that they know that when the sore throat begins they are in for a subsequent rheumatic outbreak.

Lastly, we have to inquire into the pathological identity, if any, between the lesions of the throat inflammations and rheumatism, and we may simplify our task by confining ourselves to tonsillitis and rheumatism.

It is regularly taught in all our text-books that the rheumatic poison affects the fibro-serous structures of the body, but the tonsil and its adjoining structures are not fibro-serous but fibro-mucous in character. Again, as age advances, the tonsils become less and less liable to inflammatory attacks, while the rheumatic tendency becomes more confirmed with passing years. "So far as quinsy is concerned, its course and culmination point so clearly to an infectious origin as to emphasize with every distinctness that it is a condition only accidentally, if at all, associated with a rheumatic diathesis."

Haig Broun again says: "Either rheumatism is a general disease which finds expression in the throat, OR else inflamed tonsils are receptacles for the rheumatic poison and media for its conductivity to the general circulation, OR still again specific germs find their way into the body under certain favoring conditions, then giving evidence of their presence by causing inflammation of the tonsils, fibrous and sero-fibrous structures;" and he adds, that in every case of tonsillitis we should examine the condition of the heart. It has been suggested that tonsillitis is really nothing but a mild attack of rheumatism. Most cases of the former are due to staphylococcus and streptococcus. Rheumatism shows in the first exudation the same morbific agents, and it is supposed that they have entered the body through the tonsils. An excess of the poison would overflow, so to speak, from the latter organs and if any point or points had been previously disturbed or possessed a weak nerve supply, the germs would pass out of the vessels and so produce an arthritis.

The foregoing seems to be a fair exposition of the question, as it is at present understood. It may be that subsequent researches into the nature of rheumatism will enable us to decide more definitely in regard to many points now mooted.

118 West Sixty-ninth Street.

ACUTE CEREBRAL PALSIES IN CHILDREN.

By S. G. COURTNEY PINCKNEY, Atlanta, Ga.,
Lecturer on Diseases of the Nervous System, Southern Medical College.

Children are liable to acute paralysis. As in adults, the lesion may be in the nerves, cord, or brain; the nerves rarely suffer, the cord frequently. It is, however, only of palsies of cerebral origin that I wish to speak.

The word hemiplegia (or paralysis of one-half of the body) has lost its strict meaning and is used to designate the paralysis of cerebral origin, no matter what the location is in the extremities.

The lesion is in the motor area, either in the cortex, brain substance or at the base; identical lesions can and do occur elsewhere in the brain, but by compensating development the other hemisphere takes up the function of the destroyed part so that permanent symptoms, unless the motor or optic tracts are involved, do not remain. On autopsy brains have been found containing large cavities with no suspicion of brain disease during life.

Though acute cerebral palsies are not at all uncommon, opinions as to their causation are contradictory. In spite of the gravity and permanency of the damage done, the lesion is not often fatal. With the exception of thrombotic softening the tendency is towards partial recovery, with not very much danger to life; for this reason the pathological condition is rarely seen till many years after its onset, when the appearance of the lesion has materially changed.

I here only consider acute palsies—those with an onset of a few hours or a day. More chronic processes, like tumors, or even abscesses, are not considered.

It is to the vascular apparatus we look as a cause for the greater number of these cases. Some, however, do not fit in this category, and it is of these cases I particularly wish to speak later.

About 50 per cent. of these cases occur in the first year of life and 20 per cent. in each of the two succeeding years. The parts affected are the leg and arm of one side—the leg, arm and face, or the arm alone—rarely both legs alone.

These palsies have much in common—an acute onset with cerebral symptoms, followed by a spastic palsy with increased reflexes, stiffening and contractions. There are no trophic or sensory symptoms. The history given us for diagnosis is meagre enough; the mother tells us that the child vomited or had a convulsion, became unconscious, and in an hour or day was paralyzed.

On examining the child we find one of the conditions before mentioned. The vascular lesions are the same as those occurring in adults, with symptoms modified by the age of the patient; it is convenient to classify them in the same way—hemorrhage, embolism and thrombosis.

Embolism of the middle cerebral artery is the most common of these lesions, either the main trunk or one of its branches being plugged. The source of the embolus is the heart or the arch of the aorta; endocarditis can generally be found.

We have in these cases a sudden onset of coma, its duration depending on the size of the vessel plugged. When consciousness returns it is seen that the child is paralyzed, the paralysis corresponding with the extent of cortex deprived of blood; later come athetotic movements and local convulsions. Fever, vomiting or prodromal symptoms are *not* to be expected.

Hemorrhage is the rarest of all lesions; it is impossible to diagnose a hemorrhage of the cortex from embolism. On the other hand, lesions of the internal capsule are generally hemorrhagic. Practically, the history is the same as embolism. We are not warranted in diagnosing hemorrhage if a heart lesion exists.

Thrombosis of an artery is practically always secondary to embolism; the history is one of embolism.

Thrombosis of a sinus is a most serious disease; the superior longitudinal sinus is nearly always the one affected; though I know of no statistics published, the mortality must be at least 80 per cent. It is generally the result of exhausting diarrheas, wasting diseases as tuberculosis, or the infectious fevers of childhood. As these are often fatal themselves, it is hard to get the mortality; it is, however, great.

Different as these pathological conditions are, if seen after the onset, the appearance is nearly identical. On examination of the child, we find a paralysis of from one limb to an entire side, spastic stiffening, athetotic movements and increased reflexes. Later we have contractures and arrested development of the limb, and if the disease is cortical, recurring attacks of Jacksonian epilepsy. Careful questioning is necessary to arrive at a diagnosis, and from the history thus given we work out the lesion.

Embolism.—The source of the embolus is generally the heart, acute or more rarely chronic endocarditis; occasionally it comes from the aorta or lungs. In typical cases we would expect—

An acute onset, acute attack of unconsciousness without warning, spasmodic twitching in affected limbs, coma never very prolonged, often only a few minutes.

Temperature normal or depressed one-half degree.

Aphasia, if right side is paralyzed.

Cranial nerves unaffected.

Reflexes at first inhibited; later much increased.

Later we have attacks of Jacksonian epilepsy in affected limbs, athetotic movements, contractures and retarded development.

As a rule, only one limb is permanently paralyzed.

The picture is one of an acute though fairly mild onset, followed by permanent though limited symptoms of irritative paralysis later.

Hemorrhage.—We have the same acute onset, but the coma is much deeper and more prolonged. A very small hemorrhage will cause more severe symptoms at the onset than the largest embolus possible.

As nearly all hemorrhages occur at the base from rupture of the lenticulo-striate artery, we do not have the symptoms of cortical irritation. Though the limb is paralyzed and somewhat stiff there is neither convulsions, athetosis or spasm of the paralyzed part. On the other hand, as the damage is in the internal capsule, the paralysis is much more extensive, generally involving a whole side.

The temperature falls in an hour from one to four degrees.

No aphasia.

After the coma disappears the condition is almost unchanged.

Later we have a persistent paralysis and stiffness.

The picture is one of an acute and severe onset followed by extensive and permanent results of a passive, instead of irritative nature.

In sinus thrombosis the picture is entirely different.

Thrombosis may be primary or secondary. Secondary thrombosis occurs from extension of suppurative processes near the sinus, generally in the lateral or cavernous sinus, as a result of ear disease. It gives no marked motor symptoms, so does not concern us here.

Primary thrombosis is the result of certain blood states, resulting in increased coagulability of the blood or diminished blood pressure, such as the infectious fevers, tubercular disease, or exhausting intestinal disease. Hemorrhage has caused this condition by reducing the volume of blood; the rigid sinus walls are unable to contract, so the blood current is very much slower.

In all cases of which I have notes the superior longitudinal sinus was affected.

We first have a history of the exhausting disease, prolonged diarrhea or bad health; then some day general convulsions, slight or severe, occur, followed by apathy, somnolence or coma. Vomiting is an early symptom, and if the child is old enough to talk, headache and mental dullness may be noticed a day in advance.

In from a few hours to a day there are developed internal strabismus, stiffness of the neck muscles, rigidity of the limbs, either both arms or both legs; epistaxis, prominence of fontanelle and edema of the scalp.

There are recurring convulsions through the whole acute process, often every half hour; these are general. Unilateral convulsions, when they exist, are due to the extension of the clot into the surface veins of the cortex.

With even such severe symptoms there is little or no rise of temperature; it is either normal or that already existing.

The prognosis is bad; fully 80 per cent. die. If recovery takes place there is the same spastic paralysis that occurs with embolism and the same irritative cortical symptoms, Jacksonian spasm and contractures, mental dullness and imperfections.

The whole picture is one of an acute cerebral process, very suggestive of meningitis, supervening on some exhaustive disease, having an onset of from an hour to a day and characterized by repeated convulsions.

All these cases have been the result of vascular disease. They are non-febrile in themselves, and inflammatory results are slight and always secondary to them. There still exists a class of cases decidedly different in onset, though resulting in the same variety of paralysis, the etiology of which is yet involved in doubt.

A healthy child is suddenly taken ill with severe meningeal symptoms; there is a rapid rise of temperature to 103 or more degrees, vomiting, general convulsions, restlessness or stupor. In twenty-four hours these symptoms diminish, and in forty-eight have, as a rule, disappeared. In a day or so it is noticed that the child is partially paralyzed on one side, face, arm and leg. This increases for a week, and then slowly improves a little, and in a year some use of the limbs is regained.

After recovery we have all the signs of a cortical lesion. Spastic paralysis, athetotic movements and attacks of Jacksonian spasm.

There is no involvement of the cranial nerves, but if the left side of the brain is affected aphasia is present.

These cases differ from the other types mentioned decidedly.

The picture is one of acute febrile disease running its course, followed after a short interval by paralysis.

These symptoms have long been attributed in a vague way to an acute encephalitis, a localized primary inflammation of the brain corresponding to a myelitis in the cord.

Strümpell has very decided ideas that are worthy of more attention than they have yet received. He believes these cases to be due to an inflammation of the motor cortex cells, a polioencephalitis, a condition with the same etiology and pathology as poliomyelitis.

This theory, though accepted in Germany, is not credited elsewhere.

Gowers sums up the following objections to it:

1. A primary inflammation limited to certain cells in a certain part of the cortex is theoretical and scarcely possible.

2. If it did occur we would have some pathological examples of the disease in the acute stage, as diseases of the brain are more fatal than those of the cord.

3. That the liability of the brain to disease is very much less than the cord, and we would expect infection to attack the cord by preference.

These objections seem to me readily answered.

That the condition is theoretical is admitted, since no specimens have been secured during the acute stage. Autopsy in later life has, however, shown the identical changes found in old poliomyelitis cases, disappearance of cellular elements, increase of connective tissue, induration and shrinking of the affected part of the cortex; in each variety of tissue the same changes.

To the objection that as diseases of the brain are more fatal than those of the cord, so, therefore, we should have some specimens showing acute changes; the answer would be that the far greater frequency of cord disease more than evens this up, and that as an actual fact this disease, whether in cord or brain, is very rarely fatal.

As to the lesser liability of the brain, this disease, when it occurs in the cord, does not affect the whole tract, but picks out situations often widely apart. If it could affect in one person the lumbar segment and in another the cervical, it might readily affect the cortex in a third case.

The treatment must vary in each condition.

In hemorrhage we do absolutely nothing. Any interference is dangerous; if the heart action becomes weak, strophanthus in small doses to strengthen it. Never use digitalis or strychnine—absolute quiet in a darkened room, on a milk diet.

In embolism the symptoms are due to the cortical anemia, resulting from the plugging of the artery. If we can push the plug farther along the artery we diminish the number of branches cut off.

To do this we give nitro-glycerine and caffeine, so dilating the artery and stimulating the heart. Nitro-glycerine is not in itself a heart stimulant. Quiet, with a simple and nourishing diet.

In thrombosis stimulation is of the greatest importance. In secondary thrombosis opening and packing the diseased sinus has given the best results, but I have never seen a case of primary thrombosis in which surgical procedure was practicable. The original disease has generally caused such great depression that surgical interference was unwarranted. All the cases I have seen so far have been fatal.

In polioencephalitis we evidently have an acute febrile disease with an inflammation of the cortex as the characteristic lesion. The management is that of other febrile conditions. Small doses of aconite, belladonna and brandy, rest and tepid baths are best.

The resulting contractures, spasms and paralysis are best treated by galvanism. Much is said against electrical treatment, principally by physicians who possess a small farradic battery, and who are unacquainted with the difference between a primary and secondary current. The effects of proper electrical treatment are often striking.

Massage and passive motion are subsidiary measures.

For the Jacksonian spasms bromides are best, but hot baths are also useful.

Slight as the mortality is, it would be still smaller were it not for the fact that all these cases are generally mistaken for meningitis, and depletive measures, assisted by cold to the head, is the staple treatment. The weaker children promptly succumb, but the stronger manage to pull through.

Counter irritation in any form is useless.

302 Peachtree Street.

REMARKS ON PULMONARY TUBERCULOSIS.*

By W. S. KENDRICK, M.D.,
ATLANTA, GA.

I must offer an apology for having no paper this evening, but my work has lately been such as to render it impossible for me to prepare one. But I shall make some remarks upon the subject assigned me.

The trend of recent investigations goes to prove that tuberculosis is an infectious disease due to the presence of the tubercle bacillus. This attacks almost any portion of the body. The danger of infection is not from the moist state but from the expectorations of the persons having the disease. These expectorations become dry and are blown about in the air, and it is the inhalations of these that give rise to the most frequent forms of phthisis pulmonalis. We have several forms of this, but the form which I propose to discuss is the chronic ulcerative phthisis. That is the general form which we meet with in tuberculosis, and in which the process is slow, as the disease may run over a number of months or years, or may remain quiescent for a length of time. The inhaled bacilli usually attack the apex of the lung, and this is generally supposed to be due to the fact that the expansion here is less vigorous. Consequently the bacilli gain a vantage point there and set up the inflammation which we find accompanying tuberculosis. The disease is manifested by nodular bodies called tubercles, which we find in the bronchioles and elsewhere in the air passages. They excite a certain amount of inflammation wherever located, and this accounts for the fact that however small an area may be infected we never have a case without a case of secondary pneumonia. They are foreign bodies and give rise to secondary solidification of the lung tissue, as they excite a certain amount of inflammation, and whether as large as my finger or as small as a pin head we have the two forms of pneumonia. When the tubercles have existed for a certain length of time they die and produce softening and caseation; and in this breaking down of lung tissue the cavity is produced. We have two processes; one is caseation and the other is sclerosis. The life of the patient will depend upon which of these processes supervenes. In caseation we have softening and destruction of the lung tissue until we have the cavity, and this process repeats itself. The process of sclerosis is much more common than we usually think, and we would be surprised at the large number of persons over 45 years of age who have the sclerotic patches; forty or fifty per cent. of the people on whom post-mortems are made are found with these patches, and yet there was no evidence of tuberculosis during the patients' lives. As before stated, it is due to one or the other of these processes as to whether the patient will die early after the invasion or whether he will live longer.

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*Atlanta Society of Medicine, December 15, 1896.

Now as to the invasion of the tubercle. It is not suspected by the patient until he is notified. We have certain symptoms accompanying this; we sometimes have dyspepsia and derangement of the stomach, loss of flesh, loss of strength, emaciation, and a dry, hacking cough. One of the first signs is hemoptysis, or hemorrhage from the lungs. This is supposed to be nearly always due to the presence of the tubercles, which produce an erosion of some blood vessel and cause hemorrhage. Where we have a profuse hemorrhage it is usually due to the rupture of one of the large blood vessels in a cavity and results in the death of the patient. At first the cough is dry and hacking, for the reason that the destructive process has not yet become sufficiently advanced. The most characteristic sign is the fever. We may have a patient with night sweats and loss of flesh and yet not suspect phthisis, but, if, upon taking the temperature, we find the patient has a slight increase of temperature, particularly in the evening, which continues for weeks (ruling out other conditions) and he have the other symptoms, we can reach but one conclusion. The fever is pathognomonic and is the most reliable; if there is no typhoid fever or anything else, we can almost make out a perfect diagnosis, which will be confirmed by finding the bacilli.

We divide tuberculosis into three stages, whether acute or chronic. The first stage is the stage of acute pneumonia, that is, the stage of tuberculization; this is the irritative or congestive stage. The second stage corresponds to the second stage of acute pneumonia, that is, the stage of solidification. The third stage of acute pneumonia is the stage of resolution, and it is at this point that these two diseases separate. In acute croupous pneumonia we have resolution and the walls return to the normal condition. In ordinary croupous pneumonia we have no destruction of lung tissue. The two diseases diverge at this point, for instead of tuberculosis terminating in resolution we have the other process which is directly opposite, and we have caseation, softening and destruction of lung tissue, however small or large the affected area may be, and thereby giving rise to cavities.

Now we come to the physical signs. In the incipient stage the physical signs are absent to such an extent that we cannot say whether it is tuberculosis or not. After the disease has reached a certain point, we value inspection, percussion, palpation and auscultation; especially auscultation and percussion, and percussion is the more valuable of the two. Inspection gives us very little; if we get anything at all it is a certain amount of lost expansion at the apex, but in many cases we will not get even this. Of course, if the disease is well advanced we get on palpation an increase of vocal fremitus. This is typical: if we lay our hands on both lungs and ask the patient to speak we perceive the difference in the fremitus on the two sides. If, in the first or second stage we get great loss of expansion, we know exactly what is going to follow; we know that we will get an increase of vocal fremitus and have dullness upon percussion, and upon auscultation we will get broncho-vesicular breathing. We will get harsh inspiration and prolonged expiration. If we listen at the beginning of the invasion of the disease we will nearly always get prolonged expiration. We get this because the alveoli are congested; the lungs lose their elasticity and it takes the air longer to escape.

The second and third stages run so close together that one description will answer for both, except when we have cavities. In the second stage of tuberculosis, which is the pneumonic stage, we get loss of expansion. I will say just here that in making examinations, it is impossible to do this thoroughly if the patients are allowed to retain any of their clothes around the thorax; they should be stripped to the waist. The loss of expansion is due to the inflammatory changes in the lungs and also due to pleurisy. We know that we will get dullness on percussion after loss of expansion, and then when we listen we get the strongest sign, which is bronchial breathing. What we hear we get on expiration, because the inspiration is active and the expiration passive. In normal conditions the pitch of inspiration is higher and of expiration lower, and the reverse is true in all conditions of solidified lungs. In solidified lungs the pitch is higher and longer in expiration and gets higher until respiration ceases.

In the third stage we get practically the same signs; we get softening of lung tissue and cavities. All three stages are going on at the same time. The third stage differs from the second upon auscultation, as we have various sounds in the third stage. These sounds are indicative of cavities filled with air or filled with fluid, or partly filled with air and partly filled with fluid. These are some of the physical signs. Of course, I have left out a great deal of it, as it is something that one could talk on for hours, but these are what we find in ordinary cases of tuberculosis. One thing especially, we do not find all these signs on the anterior surface of the chest, and we hardly get them at the apex, but usually below the clavicle, not at the apex itself, but a little lower down. We may get well marked solidification and cavities on the posterior portion before any signs appear on the anterior surface of the chest.

As regards prognosis we cannot say in all these cases that death will be the result, for many cases are retrogressive and the patient will live for a number of years and go on discharging his duties. Death, of course, comes to a number of cases from many causes. In the latter stages the disease becomes a septic disease in which the tubercle may not play an important part, but a general septic condition is produced and death is due to sepsis.

PUERPERAL CONVULSIONS, AND THEIR PREVENTION.*

BY JOHN N. UPSHUR, M.D., RICHMOND, VA.,
Professor of the Practice of Medicine in the Medical College of Virginia, etc.

A firm conviction of the great responsibility resting upon us in the care of the puerperal woman, and the skilful guidance through the perils of this period to its happy consummation in a safe delivery, is the motive prompting to the discussion of this condition—so frightful in its manifestations and so dire often in its consequences.

I cannot emphasize too much the importance to the patient of an early engagement of her medical attendant, that she may be closely in touch with him, and that he, by *extraordinary diligence,* may be keenly alive to every circumstance which may be to her a source of peril. Giving to his patient advice as to personal care, of diet, exercise, rest, bowels and kidneys; making regular, often frequent, analyses of the urine, to determine the presence of albumen or the lacking elimination of excrementitious solids. Often there is danger ahead when urinary analysis is negative in its results, and the nervous system is ripe for a dangerous explosion so soon as something occurs to excite the requisite reflex. I cite the following cases for sake of illustration:

CASE 1. Mrs. T., a woman of fine physique and robust health, came under my care in 1885; she would never permit me to see her until labor came on, though reported by her husband as being very dropsical. Frequent examination of her urine failed to show any albumen, though the amount of urine was scanty. Treatment, through the medium of her husband was, of course, very unsatisfactory. When labor came on, I found her the most dropsical woman I ever saw at term. She was kept under chloroform, until delivered with instruments, after a protracted labor. In four succeeding pregnancies she was never so dropsical again, but each period of pregnancy was filled with symptoms of threatened eclampsia. The patient was a hearty feeder, her urine was usually scanty, albumen apparent on analysis, but not marked.

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*Read before the Richmond Academy of Medicine and Surgery, November 24, 1896.

In her third pregnancy she had an attack of vertigo, followed by a period of insensibility; she has always suffered with her head. Her treatment during each pregnancy consisted of low diet, abundant drinking of lithia water, and keeping bowels in a condition of mild diarrhea. She has usually taken chloroform during the latter part of the second stage of labor, and has been safely delivered five times without a single convulsion, and is now doing well in her sixth pregnancy, having reached the end of the sixth month.

CASE 2. Mrs. W., of delicate build, in her second pregnancy, during the ninth month, had agonizing headache, which failed to respond to remedies; saw flashes of light and other objects continually before her eyes. When labor came on, she was kept under chloroform until delivered; her skin was so dry as to feel parched. Repeated examination of urine failed to detect any albumen. Within an hour after delivery, she complained of not being able to see (she had had no undue amount of hemorrhage) and began to talk wildly and incoherently. Chloroform was given to control excitement, followed by full doses of potassium bromide and pilocarpine; skin acted freely and all untoward symptoms subsided; urine showed large percentage of albumen. Convalescence uneventful until fourteenth day, when marked symptoms of septicemia developed; but she passed safely through a most dangerous illness.

CASE 3. Mrs. H. had been carefully watched during second pregnancy, urine frequently analyzed, with negative results. About the time she reached the fifth and a half month I was called to see her with a sharp attack of cholera morbus; a day or two of treatment was sufficient to restore her to health. She was discharged with caution as to imprudence in diet, and every other respect. On the evening of next day, she went out to supper, eat very heartily of almonds and raisins. I was called early the following morning to see her in what her husband called a *trance*. When I reached her she talked to me rationally, and manifested no symptoms of special gravity. At 4 p. m. she was seized with a violent puerperal convulsion, quickly followed by a second, and for a few moments I thought her dead. I bled her freely from the arm, labor was brought on, and after delivery she made an uneventful recovery—urine for the first time loaded with albumen. Her next pregnancy progressed satisfactorily to the ninth month, when she complained of distressing head symptoms, urine scanty, but free from albumen; some disturbance of vision. She was freely purged with calomel gr. vj., croton oil gtt. j, with complete relief of head symptoms. The week following, head symptoms again returned, and the dose of calomel and croton oil was repeated with as prompt relief as at first. Labor came on a few days after, and she was safely delivered, without any complication; convalescence speedy and uneventful.

CASE 4. Mrs. D., primipara, age 22, stout and plethoric. I was retained six weeks before confinement. Frequent analysis negative, except once a trace of albumen, until October 12th, when urine was found loaded with albumen, being almost solid on boiling. Was called at 10 p. m.; found she had had three convulsions, cervix rigid, dilated size of a nickel. She was bled freely from the arm, manual dilatation persisted in for five hours; child turned and delivered; a serious convulsion during the labor, which looked as though it would be fatal; no untoward symptoms during convalescence. I found that she had been complaining for a week before the labor with violent headache.

CASE 5. Was called in consultation to see Mrs. H., primipara, age 22. Saw her at 6:30 p. m. She gave the history of an unusually comfortable pregnancy. Had engaged her medical attendant *two days* before; said she had passed sufficient urine. Awoke at 5 a. m. same morning with severe headache across vault of cranium, extending over occiput and down back of neck, and some abdominal pain, which was supposed to be colic, as her time was not up (280 days) till two weeks later. Had been abstemious in her diet during lattter part of pregnancy, abstaining from eating any supper. Just before 3 o'clock p. m. she described a sensation in her head as if blood was trickling through it, and a few moments later a violent elampsic seizure developed. Her medical attendant, when he saw her in the morning, had ordered ⅛ gr. doses of sulph. morphia every two hours—she having taken in all about ⅛ gr. So soon as he saw her after the convulsion, he bled her freely and administered chloroform, controlling the convulsion. When I saw hers he was completely relaxed, os fully dilated and bag of waters filling the vagina—ruptured accidentally in my examination. Labor progressed satisfactorily, and she was delivered of a live baby at 8:15 p. m.—skin hot and dry, pulse soft, feeble and 120 per minute—profoundly unconscious. Another convulsion at 9 p. m. No secretion of urine since early morning; an enema of bromid. potass., sulph. morph. and camphor was administered, and she passed into a quiet natural sleep, having a good night with the exception of slight restlessness. She had also a hypodermic of 1-20 gr. sulph strychnia. On next day she had three more convulsions, but of diminishing severity and longer interval; vision impaired, and she was unable to recognize her friends before the third day; periods of consciousness alternated with periods of delirium. The baby had one convulsion on the day subsequent to its birth, but afterwards did well.

It is not my purpose to discuss the classification or causes of eclampsia; this is sufficiently done in all modern text-books. It is in the direction of such *care as will prevent the occurrence of convulsions* that I wish to consider the subject.

The cases cited as illustrative, emphasize—*first*, the necessity of early engagement, and subsequent close supervision. Case 1 shows how such care warded off trouble in five pregnancies. Case 2 points to threatened trouble indicated by the severe head symptoms with negative evidences from the urine, and, with Case 5, emphasizes this symptom and the hot, dry skin, relief coming when the skin and kidneys had their function restored. Cases 3 and 4 point to the necessity of careful dieting, and the overloading of the stomach as an exciting cause—in the one case, no albumen, and in the other albumen only twice discovered prior to the development of convulsions. Where there is excessive eating, a hypernutrition is the result in a system in which there is already a hyperplastic condition of the blood. The attempt on the part of the kidneys to eliminate increased effete matter begets kidney irritation—it fails in its function, and the appearance of albumen in the urine is the external manifestation of poisoning of the system by toxines, which, unless eliminated, result in an eclampsic explosion.

The patient's diet should be nutritious, digestible, not rich; regular exercise in the fresh air, and especial care of the bowels and kidneys.

The administration of saline cathartics should be frequent, making the mucous membrane of the bowels eliminative and derivative; an abundance of lithia water and other necessary diuretics, to stimulate the kidneys, If the patient shows evidences of anemia full doses of the tinct. chloride of iron long continued will be of value.

The treatment of the case when convulsions occur, I believe, consists imperatively in free administration of chloroform and prompt bleeding, with active purgation if the bowels are constipated; nor should we forget that the welfare of the patient depends upon as *prompt* delivering as possible—by manual dilatation of the womb and forceps or turning. When, as in Case 5, the patient remains unconscious after delivery, with symptoms of depression, as evidenced by rapid, feeble pulse, a hypodermic of strychnia nitrate will do much good by its action in sustaining the heart and diminishing cerebral congestion by its toning up effect on the vasso-motor nervous system, and at the same time sustaining the uterus in firm contraction.

I am convinced of the usefulness of morphia in conditions of rigid os and cervix in the first stage of labor—*but,* if there be symptoms of threatened eclampsia, *it is positively contraindicated, and should not be given* in the treatment of the convulsions; it arrests secretion in the skin and kidneys, and favors the retention of the effete materials in the system.

THE APPENDIX AND FOREIGN BODIES.

Autopsies upon 400 persons dying of various diseases showed fecal concretions in the appendix in ten per cent., while in Renvier's collection of 454 autopsies after appendicitis there were found 179 concretions and 16 foreign bodies in this organ. Hawkins examined 60 fatal cases of appendicitis and found no foreign body whatever. Fitz analyzed 300 cases and found concretions in five per cent.—*Northwestern Lancet.*

THE CLINICAL EXAMINATION OF SPUTUM.

By JAMES I. JOHNSTON, M.D.,

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It is not the intention, to present in this short article, anything very new in the clinical examination of sputum, but rather to emphasize again the use of the sputum as a factor in diagnosis to the general practitioner.

In the last few years the microscopic examination of the sputum has become of prime importance to our patients, as well as to ourselves. Since pulmonary tuberculosis, which one cannot but believe is curable in its incipient stage, kills more patients than any other disease, should we not insist as much on the examination of the sputum for suspected phthisis as we do on the thorough examination of the urine for suspected nephritis?

Let us then consider sputum examination under two heads; first, macroscopically, and second, microscopically.

The macroscopical, gross, or unaided ocular examination of sputa, should never be neglected, if possible. Patients' statements in this regard are often misleading, and, beside, to the trained physician, the objective signs are the more reliable, and generally influence more his treatment.

1. When the sputum is thin, light in color, and even streaked with blood (usually scanty), it is called mucoid, and should suggest an acute inflammation, except, perhaps, in asthma, where mucoid sputum is seen—the blood is present only in the severe cases. The frothy, watery sputum of pulmonary edema would properly come under this class.

2. As acute inflammations of the respiratory system tend to heal, to become sub-acute or chronic, the sputum becomes thicker, yellow, more viscid and abundant, and is usually spoken of as muco-purulent. The sputum of convalescing acute bronchitis, pneumonia, chronic bronchitis, and phthisis is familiar to all of us. Among the rarer forms of pulmonary affections in which this form

of expectoration is found, are malignant growths in the lungs and actinomycosis—this latter can only be distinguished from chronic bronchitis by the microscope (finding the fungus). With the exception of chronic bronchitis, occasionally, the above two forms of sputum rarely have any odor.

3. Purulent sputum consists almost entirely of pus, and is slightly tenacious, yellow or green in color, fetid, and is periodically abundant. It is seen in phthisis with cavity, bronchiectasis, and would be present in abscess of lung and rupturing empyema. In hospital practice, before pulmonary tuberculosis was excluded, this periodic expectoration of purulent sputum was not an uncommon sight, for many patients did not come into the wards until late in the disease, when cavities were present.

4. Rusty and tenacious sputum always suggests croupous pneumonia, although this disease may be present without this usually characteristic sputum. This is especially true in croupous pneumonia complicating typhoid fever, and hence this condition of the lungs is frequently overlooked. It is also true in the croupous pneumonia of children and old people.

5. Again, in severe adynamic cases of croupous pneumonia, the sputum may be thin and dark colored, when it is aptly called prune-juice sputum. I have seen this a few times—once in a double croupous pneumonia complicating typhoid fever, which rapidly proved fatal. It is said to be due to blood retained in the lungs, and occurs also in gangrene and cancer of the lung.

6. Nummular sputum (so called from its coin shape) consists of round, flat, heavy masses, which sink in water. This is commonly seen in advanced phthisis.

7. Other forms are sputum containing fibrous masses; currant-jelly sputum (said to be indicative of cancer); and fetid sputum, occurring in bronchiectasis, phthisis, gangrene, abscess and occasionally in chronic bronchitis—this last separates into three distinct layers on standing.

From the rapid survey of the macroscopical appearance we turn to the second and more important division of our subject, viz.: the microscopical examination of sputum.

1. Before the work of Koch in tuberculosis, the finding of

elastic tissue in the sputum was considered good evidence of phthisis, and indeed some clinicians still lay stress upon its diagnostic properties, but this should be no criterion with our present knowledge. It indicates destruction of lung tissue, but may be due to other causes than the tubercle.

It is examined as follows: The night sputum is treated to an equal part of a (20 gr. to the ounce) solution of caustic soda and boiled. As soon as it boils add about five times the amount of cold distilled water, and allow to settle. The sediment is then examined under low power as for tube casts in urine. Yellow elastic strings can then be readily seen.

2. In the sputum of asthma, and it is said also in that of croupous pneumonia occasionally, are seen spirals, named for Curschman, who first described them, which are probably molds of the finer bronchioles, and are formed of mucin. Also in the same disease, asthma, are seen transparent octohedra crystals called Charcot-Leyden crystals for these observers. These show well under the microscope and are found during and immediately after the paroxysms—their true significance is, I believe, unknown. The Charcot-Leyden crystals are found also in leucemic blood.

3. Crystals of fatty acids, and hematoidin are seen in gangrene, abscess and cancer, and indicate altered blood.

4. But the foregoing are all of minor importance to the examination of sputum for the tubercle bacillus. As Osler says, in his article on tuberculosis, and it is printed in italics: "The presence of these bacilli in the sputum is an infallible indication of the existence of tuberculosis." It is, then, the duty of every practitioner, as soon as phthisis is suspected, to examine, or to have examined, the sputum of his patient. If found in any abundance, the diagnosis is certain.

There are quite a number of methods for staining the bacilli in sputum, but the following seems to me the simplest and easiest for the use of the busy practitioner. It is a slight modification of the one taught in the laboratories of the University of Pennsylvania, a few years ago, and is, as remarked by a hospital interne, in an institution in which this method is followed, one you can almost be careless in the use of, and yet get results.

This method is as follows: A small flake or particle is selected from the specimen to be examined, and either teased and spread out on the cover glass, or perhaps better, pressed between two cover glasses, which are then separated and allowed to dry. This is then fixed by passing the cover glass a few times through the flame which coagulates the albumin. The solution of carbol-fuchsin (1—fuchsin, 10—alcohol, 100—of 5 per cent. solution of carbolic acid) is dropped upon the specimen on the cover glass, which is held over the flame until fumes are seen to rise. The cover glass is then washed with water which removes the excess of the solution, and then placed in a 5 per cent. sulphuric acid solution until the cover shows a faint pink. The counter stain is an alkaline solution of methyl blue (Lœffler's), which is then added and allowed to remain for about thirty seconds. The slide is now washed in water, dried between filter papers, mounted temporarily in glycerine, or permanently in Canada balsam, and examined. This requires a one-twelfth oil-immersion lens for satisfactory work, when the bacilli, if present, are seen stained red, while everything else in the field is stained blue. The tubercle bacillus is rod-shaped, slightly curved, about one-half the diameter of a red blood cell (which is 1-3000 of an inch) in length, with rounded ends and occasionally beaded in appearance, possibly due to spores. Its characteristic in staining is that it resists the acid differentiating solution which affects all other tissues, and hence by contrast stain we are able to see it clearly.

The thinner the film of sputum, and the more complete the differentiation, the better slide we will have for examination.

The greatest obstacle to the ready use of this examination is the possession of an oil-immersion lens on account of its expense, but I do not believe there is any one here who has not access to such a lens, either through the kindness of a brother practitioner, or a hospital laboratory. Slides could be prepared in one's office, and examined later at hospital or elsewhere in a few minutes. The absence of bacilli in one examination should not exclude the possibility of tuberculosis, but a second and even third examination should be made. The association of this bacillus with tuberculosis is beyond doubt. Since advanced by Koch, of Berlin, some twelve years ago, little has been added to, or taken from, its significance.

5. Another micro-organism in the examination of sputum, of some importance, is the diplococcus pneumoniæ of Fränkel. While this organism is often found in the sputum, even in health, it is said to be present in all expectoration of croupous pneumonia and is now, I believe, considered the cause of this disease, making the croupous pneumonia an infectious disease. In all the specimens from patients suffering from this disease, which I have examined, diplococci have been abundant. Of course the other signs and symptoms help us in the diagnosis of this disease, yet I think it is worth while looking for the bacillus, although the number present in a specimen is hardly indicative of the severity of the attack. The diplococci can be readily stained by adding to the dried sputum a solution of methyl blue, when, under a moderate power, they can be seen readily, in pairs, surrounded by a capsule, hence called diplococci.

From what has been said, it is apparent to us all that the examination of sputum, both macroscopically and microscopically, is of the utmost importance, especially the latter, for the tubercle bacillus; and that in clinical diagnosis it plays a part secondary to none, not even to the examination of the urine for albumin and casts, nor of the blood for anemia or plasmodium malariæ.

THE TREATMENT OF WARTY GROWTHS OF THE GENITALS.

William S. Gottheil, in a paper on "Epithelioma of the Penis," read before the Society for Medical Progress, November 14, 1896, concludes as follows (*International Journal of Surgery*, January, 1897):

1. Warty growths of the genitals, more especially in the male, are always to be suspected of malignancy, no matter how innocent they seem.
2. They should either be left entirely alone, or be thoroughly removed by knife or cautery.
3. Inperfect attempts at destruction, as with nitrate of silver, carbolic acid, etc., are especially to be avoided; there being many cases recorded in which they have apparently stimulated a benign growth into malignant action.

SOCIETY REPORTS.

SECTION ON OPHTHALMOLOGY, COLLEGE OF PHYSICIANS OF PHILADELPHIA.

PHILADELPHIA, November 17, 1896.

Dr. J. M. Da Costa in the chair.

"Unilateral Albuminuric Retinitis," with a case, by G. E. de Schweinitz, M.D. After a brief review of the literature of unilateral albuminuric retinitis, during which reference was made to fifteen cases, Dr. de Schweinitz reported two examples that had come under his care, both in colored men. In the one instance clinical examination indicated chronic nephritis, and there was unilateral neuro-retinitis. The patient, however, was not seen again and his subsequent history was unknown. In the second case the patient had been under observation for five months, and had all the symptoms of chronic interstitial nephritis with unilateral (right side) retinal lesions. Water colors illustrating the condition in two stages, were presented, indicating that the primary lesion had probably been a thrombosis in the lower nasal vein with secondary involvement of the disc and retina. Dr. de Schweinitz agreed with Knies that unilateral albuminuric retinitis is not so great a rarity as some text-books would lead us to believe. A certain percentage of cases maintain monocular retinal lesions until death; in another the unilateral character of the affection is maintained for a considerable portion of time, but ultimately becomes bilateral. Dr. de Schweinitz suggested that an interesting clinical observation in these unilateral cases would result from catheterization of the ureters and separate analysis of the urine from each kidney. His patient had declined to submit to this procedure.

"Report of the Successful Removal of a Piece of Steel from the Vitreous by the Hirschberg Magnet," and exhibition of the patient, by G. Oram Ring, M.D. J. S., aged twenty-eight, was admitted to the wards of the Episcopal Hospital, June, 1896. Six hours previously a piece of steel from an anvil penetrated the right lower lid and the ocular coats, and was lodged in the nasal side of the anterior portion of the vitreous, where its position could be distinctly outlined. The cornea, iris, and lens were uninjured. A minute bead of vitreous protruded from the wound in the sclera. The choroid was ruptured and retinal hemorrhage was profuse at the site of the injury, V. $\frac{20}{200}$. The following day, under antisepsis and cocaine anesthesia, an incision was made with a Graefe knife through the conjunctiva and sclera six mm. from the corneal border and opposite its lower third. While the edges were retraced by an assistant, the straight tip of a Hirschberg magnet was inserted. Upon withdrawal of the magnet, after its second introduction, a piece of steel 6 x 2 x 1 mm. was found clinging to it. No sutures were used. Recovery was prompt and uneventful. A patch of atrophied choroid corresponding to the rupture can be seen through the now transparent vitreous. The vision has increased to $\frac{20}{70}$.

"A Case of Foreign Body in the Vitreous," with exhibition of the patient, by M. W. Zimmerman, M.D. The patient, J. J., was wounded by the explosion of a copper dynamite cartridge January 18, 1890. The fragment entered the sclera of the left eye seven to eight mm. to the nasal side of the corneal limbus. Blood filled the anterior chamber for two days. After absorption the foreign body could be seen in the vitreous opposite the base of the iris on the temporal side. A drawing made at this time represents exactly its present position and appearance. One year later there was a moderate hyalitis of unknown origin, and confined to this eye, ending in complete recovery. The patient was treated at this time by the late Dr. George T. Lewis, whose notes furnish the above facts. The boy consulted me first in March, 1896, on account of accommodative asthenopia. A weak hyperopic cylinder relieved the symptoms and gave normal vision, which has continued. The presence and unaltered position of a piece of copper for seven years without irritation give interest to the case, and particularly in view of the opinion of Leber and others, that copper is more dangerous to the safety of the eye than other metals. In this case the fragment has become lightly encysted and gives no metallic reflex, excepting in a very dark room, where it emits to the illumination of the ophthalmoscopic mirror a reddish tinge.

Dr. H. F. Hansell read a paper upon "Report of the Successful Removal of a Piece of Steel from the Vitreous by the Hirschberg Magnet," and exhibited the patient. J. S. received a small fragment of metal in the left eye in April, 1896. After the transient discomfort had subsided, he gave the accident no further thought, until it was revived in his memory by the questions asked when he applied in October at the Jefferson Hospital, on account of failing vision and inflammation in the eye. A bright reflecting piece of metal could be readily seen with the ophthalmoscope floating in the vitreous, and a small scar below, and to the outside of the corneal limbus was found V. $\frac{20}{200}$. An incision through the conjunctiva and sclera between the external and inferior rectus was made, through which the smallest tip of the Hirschberg magnet was inserted. After two unsuccessful efforts, a small triangular, corroded piece of steel was removed with the loss of an insignificant amount of vitreous. In one week the vision was $\frac{20}{50}$. Three points may be noticed in connection with this case; namely, the comparatively long time between the entrance of the steel and its retraction of the edges of the scleral cut as the tip of the magnet was withdrawn, and the recovery of excellent vision.

Dr. Charles A. Oliver presented a "Brief Clinical and Histologic Study of a Case of Epithelioma of the Corneo-Scleral Junction." The condition was found in a sixty-nine-year-old man. The growth first manifested itself as a small "pimple" at the lower outer corneal border of the right eye, and gradually and painlessly increased in size. When first seen, it appeared as a fleshy and wart-like looking mass about the size of a pea, and embraced an area equal to almost the lower outer quadrant of the cornea.

In spite of careful excision with free thermo-cauterization repeated more extensively some two months later, the mass recurred until in four months' time it had become so great in size and so angry in appearance, that the eyeball with the surrounding conjunctiva was removed, the operation, by reason of renal and cardiac disease in a weak and feeble patient, being almost painlessly done during local anesthesia by the use of hydrochlorate of cocaine. Up to present writing there has not been any recurrence.

From a clinical standpoint the case is most interesting. Commencing as a "pimple" in the epithelial structures of the conjunctiva at the transition-border between the cornea and sclera, as is almost universal in such cases, the mass gradually and painlessly increased in size until it assumed the papillomatous variety of growth. It then extended into and beneath the epithelium of the cornea far in toward the summit of the membrane. In other words, the tumor mass evidenced its development and growth in a manner that is eminently characteristic of epitheliomatous formations.

The quick recurrence and steady increase of the growth, in defiance of the extreme radical measures employed for extirpation, manifestly evidenced the necessity of removal of the entire field of malignancy. The almost uncontrollable oozing of blood, experienced during the operative procedure, plainly showed the extreme vascularity of the neoplasm.

Microscopically, the specimen was exceedingly instructive, not only by reason of presenting the characteristic appearance of epitheliomatous formation in the region involved, but upon account of the undoubted protrusion of the epithelial cells into the interlamellar corneal spaces (which possibly might have been produced or rendered more easy by the operative procedures pursued in the earlier stages of the disease), and the insertion of the same form of malignant cells into the superficial layers of the sclera (layers which were untouched by operation); but is also of great interest in substantiating the view that the deepest penetrations of the epithelial cells into the outermost tunics of the eye were in the transition zone between the cornea and the sclera—that is, at the corneo-scleral junction.

Dr. Oliver exhibited a series of "Ophthalmoscopic Pictures of Peculiar and Rare Chorio-Retinal Changes, the Result of Traumatism." The first of this grouping was seen but a few hours after the patient, a man of forty-two years of age, had been struck in the left eye by a fist. Almost total blindness ensued immediately after the accident.

The eyeball was unruptured. The cornea seemed unusually brilliant. The anterior chamber was deepened, especially in its peripheral portion. The pupil was round, and the iris, though tremulous, was mobile to consensual reaction. The lens was dislocated directly back, its superior border resting against the retina just behind the inferior portion of the equator of the globe. The vitreous humor contained some rather fixed, doubtful streaks of blood in its anterior portion.

As shown in a water color sketch which was exhibited, the optic disc was greenish in tint and appeared bloodless. There were a few deeply situated hemorrhages in the retina, and a series of large choroidal ones extending along the retinal vessels, which were reduced to mere threads. These were broad and greenish elevated areas, as though the deeper retinal tissues against the choroid were thickened, swollen and opaque. The patient became blind in a few minutes and never regained vision.

In contrast with this sketch, which illustrated the grossest effects as seen ophthalmoscopically from concussion accidents, Dr. Oliver exhibited water color drawings of five other cases extending from minor degrees of visible change to the more pronounced varieties, one of which (the fourth example) closely resembled the chromo-lithograph in Jonathan Hutchinson, Jr.'s, well-known case.

Dr. Edward Jackson presented a case of "Deficiency of Pigment, Allowing the Fundus Reflex to Show through the Iris." At a former meeting of the Section he had shown a similar case. Both of these patients had undergone cataract extraction; in the one shown this evening there was rupture of the sphincter, the lens having proved to be larger than the average. It was the only time he had met this accident in simple extraction. The fundus reflex showed through other parts the iris almost as readily as through the part at which the rupture had occurred. Possibly it might be that there were other ruptures of the iris, but the distribution of the fundus reflex was entirely different from that indicating rupture of the iris. It constituted a general area of red against which the details of the iris were seen. It was rather a rounded area, and did not consist of fissures through which red reflex could be obtained It could hardly be regarded as a rupture of the posterior layer of the iris because there was no change in the outline of the pupil.

There was no deformity of the pupil in the case previously reported. Rupture of the posterior layer would necessarily cause deformity in the pupil, certainly a rupture of such considerable size. The posterior layer opposes the action of the sphincter, and the two together give the pupil its form. It is quite possible that this appearance is the result of atrophy of the pigment cells from stretching of the iris, but probably it is simply an atrophy comparable to the changes in the choroid in the eyes of many old people. Attention is called to this condition, one that may readily be overlooked, since it is perhaps more common than the two cases would seem to indicate. It is brought out while illuminating the fundus as much as possible, at the same time leaving the affected part of the iris in comparative darkness. As only three weeks had elapsed since the extraction, the time was too short for any extensive atrophy to occur. The pigment of the iris was not rubbed off by the lens in its passage through the pupil.

HOWARD F. HANSELL,
Clerk of Section.

LUPUS VULGARIS IN THE WIFE AND DAUGHTER OF A TUBERCULOUS SUBJECT.

Dr. J. McF. Winfield (of Brooklyn) reports these cases in a paper presented at last meeting of the American Medical Association (*Jour. Am. Med. Assn.*, December 12, 1896):

The husband and father died of tuberculosis twelve years before.

During his illness he was extremely uncleanly, wiping his mouth after expectoration upon the family towel and expectorating upon the floor by preference.

A small scab was rubbed off the wife's nose in using the towel. This was the starting point of a lupus patch covering the nose.

The child's face became extensively involved during the early years of its life, having first shown the disease before the father's death.

He thinks the infection of mother and child was easy through contact with the towels and floor contaminated by the husband and father.

CORRESPONDENCE.

MEDICAL ASSOCIATION OF GEORGIA.

ATLANTA, GA., January 1, 1897.

MY DEAR DOCTOR: No pains will be spared in the efforts to make the coming meeting of the Medical Association of Georgia the largest, the most interesting and the most profitable meeting in the history of the Association. A number of the most prominent members of the profession, representing the different departments of medicine and surgery, will be present from various parts of the country, adding much scientific interest and value to the proceedings.

The Association has reached a point where members cannot afford to remain away from its meetings without detriment to themselves professionally. The high character of its work is expressed in a letter from the able and delightful pen of Dr. Samuel Lloyd, of New York, published in the *New York Post Graduate Journal*. He says: "While the atmosphere of the meeting (1896) was distinctly scientific, there was also a marked tendency to have a good time. Looking back at the meeting one cannot but feel that the average of the work was of a most superior character. It compares favorably with any meeting of the New York State Medical Society that I have attended, and there can be no question that, aside from the rest one gets by a trip to these State Societies, *a great deal of information may be gathered if the rest of the State Societies are of an equally high average as that of the State of Georgia.*"

Now that political and other disagreeable features have been removed from the meetings and a great impetus given to the furtherance of scientific, practical medicine and surgery, it is hoped that each member entertains an equally high appreciation of the good work of the Association as others outside the State, and that all will perform the duties encumbent upon them as members of a scientific body. Therefore, I personally appeal to you to make an earnest effort to be present and contribute to the success of the coming meeting in April next, at Macon, Ga.

Most respectfully yours,
GEO. H. NOBLE, President.

[We presume all members of the Association have received copies of the above letter from the President, Dr. Noble. THE JOURNAL takes pleasure in adding its appeal to members to be present at the Macon meeting and assist in the upbuilding and strengthening of our State Association. This Association ought to be the pride of each individual member, and each should be glad to contribute his energies and influence to make it a success. We are informed by Dr. Noble that there are already indications pointing to a good meeting in April, and our Macon friends say that preparations are making for a "red-hot" time, whatever that may mean. Get ready, Doctor, write a good paper and don't fail to be on hand at the proper time.—ED.]

"GOD AND THE DOCTOR WE ALIKE ADORE."

DETROIT, January 9, 1897.

Editors Atlanta Medical and Surgical Journal:

The verse in the back of your JOURNAL for January, 1897, which you ask for the author of, is from Goldsmith. It is a familiar quotation.

Yours truly,
GEO. DUFFIELD.

CATGUT may be rendered aseptic and even antiseptic without complicated apparatus by the following simple method: Wind the gut on reels. Shake the full reels in a jar of ether to remove the fat. Soak them in ten per cent. carbolic made with alcohol for from six to twenty-four hours according to the thickness of the gut. Now place the reels in pure alcohol and the catgut is ready for use, and will be found to have lost little or none of its tensile strength.—*International Journal of Surgery.*

EDITORIAL.

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MEDICINE IN 1896.

The Boston *Medical and Surgical Journal* is accustomed to present at the end of each year a concise review of the progress of medicine and surgery during the year. The review for 1896 is particularly interesting and justifies a condensed report of it here.

The year marked the centennial anniversary of Jenner's first successful vaccination, and in a number of places in all countries appropriate celebrations were held in honor of this important discovery. The semi-centennial (October 16) jubilee of anesthesia was celebrated in Boston in honor of the demonstration of anesthesia in the Massachusetts General Hospital fifty years previously.

Considerable use has been made of the Roentgen rays in medicine and surgery. The first application was the detection of foreign bodies in the tissues, particularly the extremities. Then with improved apparatus the deeper regions were explored, and bodies have been located in the esophagus, the gastro-intestinal canal, etc. Uric acid calculi were found to obstruct the rays, but gall-stones were transparent to them. But it is in the diagnosis and treatment of fractures and dislocations that the rays have found, and will probably continue to find, their most important application. One may now tell almost with the certainty that comes from direct observation whether a fracture or dislocation is properly reduced. The diagnosis of tumors of bones and of joint lesions has been greatly facilitated, affording most valuable aids to prognosis and treatment. The fluoroscope has thrown its light upon deep-seated chest affections, and tuberculosis of the lungs, pleurisy with effusion, aneurism of the aorta, dilatation of the heart, etc., have been made out with its help.

During the year smallpox has prevailed in certain sections of the country, but has usually been well controlled. Along the Mississippi and Ohio rivers it has existed, chiefly among the negro deck-hands on river steamers. In January and February it appeared in New Orleans and Memphis and began to spread rapidly. Steamer crews were vaccinated by sanitary inspectors, and by the spring there was a marked decline in the number of cases all along the Mississippi valley. A severe outbreak occurred among the negro population of Key West during June and July. A rigid quarantine was established and house-to-house vaccination was practiced by State and Marine Hospital officials and the epidemic was under control by the middle of August. Of course conditions incident to the war in Cuba have favored the existence and spread of smallpox. The crowding together of troops, the massing of the country population in large towns and the destitution caused by the war have favored the prevalence of both smallpox and yellow fever. The mortality in the Spanish military hospitals has been high. In Santiago alone there were thirty or forty deaths per week in July and August. In one week in Havana there were sixty-seven deaths. There were small outbreaks during the year in Arizona, Texas, Illinois, Kentucky and West Virginia. To some extent also it has existed in London, Gloucester, Constantinople and Rio de Janeiro.

Yellow fever has prevailed in the seaports of the West Indies, its continuance being favored by the disturbed conditions in the islands. Its ravages have been greatest among the Spanish soldiers. Smallpox has been more fatal among the native population. Our efficient quarantine regulations have preserved our own seaports against infection. Only one case of yellow fever landed on our shores during the year. This patient arrived at New York in October and was detained at the quarantine island, where he died in three days.

Antitoxin for diphtheria has continued to justify the hopes that have been placed in it. From the report of the American Pediatric Society's collective investigation we learned of 3,384 cases treated by 615 physicians, and of 2,400 cases treated by the Board of Health in New York and Chicago, and the mortality of the whole was only 12.3 per cent. It was clearly shown that the earlier the remedy was employed, the better the results and the lower the mortality. These statistics embrace the reports of a large number of physicians in widely separated localities, and they represent every variation as to local conditions, severity of the epidemics, etc., and they are more valuable therefore than statistics gathered from single institutions.

"From all quarters and under all conditions where the antitoxin treatment has been carried out, the reports issued during the year 1896 have fully sustained the claims made for it. There can be no doubt that thousands of lives have already been saved by this remedy, which may be justly termed the greatest contribution to the healing art made by modern scientific medicine."

THE COLONIZATION OF EPILEPTICS.

Two years ago New York State established a colony for epileptics modeled upon the similar colony at Bielefeld, Germany. The manifest object of this wise and humane legislation was to get these unfortunate people out of the asylums and almshouses, and to give them a home; to provide them with schools and industrial training, and to give each case careful scientific study and treatment.

The institution was opened for the reception of patients February 1st, 1896, at Sonyea, New York, upon a reservation of 1,872 acres of land, part of which lay in the fertile and famous Genesee Valley. The first report of the colony has just been made, and we have also before us an interesting paper by the medical superintendent, Dr. Spratling, upon "What the Colony System Means in the Care and Treatment of Epileptics."*

These papers show eloquently what judicious and scientific care and management may accomplish for epileptic patients in a colony. In the colony the epileptic is given something to do; he is given an occupation; he is made productive. Those whose physical condition admit of it are put at light manual labor, and not only does this supply one of the important features in the proper management of the epileptic, but each, from an economic point of view, is made to a great degree, self-supporting. In the first eight months embraced by the report 145 patients were admitted. "The first fifty cases received had during their first month at the colony 708 seizures; the same fifty cases, after five months of treatment, had collectively during the fifth month 315 seizures." "Nearly every individual markedly improved physically and gained weight. Their epileptic seizures have diminished in frequency to a noteworthy degree, and in a few

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*Albany (N. Y.) *Medical Annals*, January, 1897.

instances there has been a complete cessation of attacks for months at a time. . . . A strong evidence of the appreciation of the colony by the patients is afforded by the fact that although held there by no legal form of commitment, but having perfect liberty of the premises, they rarely manifest the least desire to leave. . . . The colony has produced about 50 per cent. of the cost of maintenance. It is expected that this percentage will be increased as the industrial facilities are enlarged."

We are sure that New York's experience with her Craig Colony for epileptics should encourage other States to adopt this initiative in the proper and humane care of their epileptics. A well conducted colony in every State would give these people a home instead of an asylum; it would give them employment in the place of alms.

THE FAMINE AND PLAGUE IN INDIA.

Dispatches from the East tell of unprecedented suffering and distress occasioned by the double visitation of famine and the plague. While the people in some of the most thickly settled portions of India were in the midst of the former the latter appeared. The *British Medical Journal* says: "The Bombay Government is face to face with the most appalling calamity which has befallen India for the past two centuries, namely, malignant plague and widespread famine. The famine can and will be ameliorated by charity, but no sanitary or medical skill can be bought whereby the disease can be stayed. The death-rate of the city stands at the fearful rate of 200 per 1,000; and there is no indication that the crisis is yet reached; in fact everything points the other way, for instead of the stability of numbers, which is maintained for a week or so, when the maximum of the death-rate is at its climax, we have during the past two weeks a wide diversity.

"The published record of deaths from plague during the past seven weeks is: 49, 51, 53, 67, 64, 173, 259. Nor is this all; for the mortality returns for 'remittent fever' during the week ending December 18, 1896, amounts to the unparalleled total of 363. In other words, 52 persons a day are dying of a fever which at its worst affords but a relatively moderate death-rate. Plague may be said to be killing its hundreds, 'remittent fever' its thousands; a truly ridiculous legend, and one bearing out the inaccuracy of the numbers of the cases of plague in official returns."

And there is no prospect of early relief. Suffering from the famine and the mortality from the bubonic plague or malignant polyadenitis are said to be at present on the increase. The flight of nearly a million people from the plague-stricken district has justly created alarm throughout Western Asia and even in Europe. Sanitary officials of the East, however, are on the alert, and are observing all energetic quarantine measures to prevent the spread of the epidemic.

ONE can hardly help being a little surprised in this *fin de siècle* period at the late unpleasantness in medical circles at Augusta over the address delivered by Dr. Jos. Eve Allen at the opening of the Medical College of Georgia upon the "Evolution of Modern Medicine" (published in our November issue). The addres was variously construed by those who heard it. Some said it was an attack upon our sacred Bible and our cherished faith. The faculty of the college in regular meeting resolved that on future similar occasions no reference to religion would be tolerated in any of the speakers; and furthermore that all lectures on all subjects should be strictly in accordance with the teachings of the Bible, and that any professor in any way violating this injunction would thereby forfeit his chair. The matter was finally submitted to the Trustees for final adjustment, to whom Dr. Allen also made a clear statement of his position, and the Trustees officially terminated the difficulty (December 28th) with the resolution that "while according full freedom of thought to every one, they request that professors in discharging their duties in this college avoid all unnecessary reference to questions in dispute between science and religion."

All of which is a veritable tempest in a teapot; which, however, has done very much more harm than would the original address of Dr. Allen if left unchallenged. We have read carefully the address which precipitated this controversy, and we fail to find in it anything which could convict Dr. Allen of being a violent heretic, or of being any less Christian than his accusers. The address was an elaboration of this statement: *The evolution of scientific medicine has been one continuous struggle with dogmatic theology.* It was easy for the speaker to sustain this theme, because he had only to cite certain illustrations from the history of medicine, such as the miracle cure, demoniacal possession, the battle for dissection, public sanitation, the use of anesthetics, etc. The author could easily have multiplied this list. Dr. Allen's statements may be verified if true, or disproven if not true, by any one who will take the trouble to investigate them, but by no sort of interpretation may they be said to assail the impregnable principles of the Christian's faith. Religion, pure and undefiled, is one thing, always the same, yesterday, to-day, and forever; theology and theologians, true and false, are quite another. Religion to-day, as well as in the past, has had occasion to exclaim, "Save me from my friends."

THIS number is the last of Volume XIII. We have tried to give our readers a clear, practical and conservative journal, without any blowing of trumpets or fictitious representations as to circulation, or chromo-inducements to subscribe. Nor have we considered it either proper or desirable to introduce literary, scientific, railway, insurance, culinary, metaphysical, sporting and other features. Woman's, children's, and poetical departments have been absolutely interdicted. These and other features above named have no legitimate place in the busy doctor's medical journal. We have some improvements in view for the next volume, and we will endeavor to make it better than the one now ended. Now is the time to subscribe or pay up back dues.

SELECTIONS AND ABSTRACTS.

THE AUTUMNAL FEVERS OF THE SOUTHERN ATLANTIC STATES AND THEIR TREATMENT.

This was the subject of an important paper by Dr. Bedford Brown, of Virginia, at the late Pan-American Medical Congress, from which we make following extracts (*Journal American Medical Association*):

Fever of a malarial origin is an annual visitant, from August to the middle of October, of all that vast section comprised within the Southern Atlantic and Gulf States, and also of a large portion of the interior, comprising the Middle, Western and Southern States. The large number of cases occurring within the vast area comprised within these borders, the distress of mind and body, the loss of time by sickness, the additional expense incurred, the impairment of health and the greatest of earthly evils, the mortality resulting, combine to render this one of the most important and interesting subjects in our profession, and how successfully to prevent malarial infection and to correct it after it enters the human system, become questions of paramount importance.

I find that this fever makes its appearance in our section about August 10 or 15 and continues to prevail until killing frost or freezing temperature begins, and then it as suddenly disappears as it appears. I find also among the profession and among the people that this fever in its simple, uncomplicated state, goes under the name of malarial fever, while in its complicated state and in its advanced stages, it is denominated typhoid fever. Hence, in all cases of malarial fever, characterized by symptoms of malignancy, as a dry tongue, delirium, jactitation, insomnia, tympanites, frequent pulse and general prostration are always miscalled typhoid, and by some typho-malarial fever. These misnomers and misunderstandings of the proper character of autumnal fever are very misleading in relation to our proper conception of the treatment and management of the disease.

In this fever which annually visits our section I do not believe that there is one case in twenty which is genuine typhoid or enteric fever, for these autumnal fevers, however they may in certain cases simulate true typhoid, disappear from our country at the first heavy frost, to return again at the next autumn. This is not the course, or a part of the history of true typhoid fever. Typhoid fever does not come in hot seasons and go in the cold, when frost and ice begin to make their appearance. Typhoid fever does not come when the temperature goes up to 80 or 90 degrees and disappear when it goes down to 32 degrees. But rather typhoid is a disease prevalent in low temperatures, in the late months of winter and early months of spring. On the contrary, malaria thrives, flourishes and grows in high temperatures and moist seasons, in flat, low localities. Typhoid fever has its favorite homes in high, cool localities in northern and mountainous sections.

The question of the origin of malaria, which is the true cause of our autumnal fevers, and of its peculiar nature, is now so well settled by scientific investigation it is unnecessary to discuss. The plasmodium malariæ of Laveran so clearly described by that careful investigator, its parasitic nature, its vegetable origin, its entrance into the circulation, its fastening itself on the red blood corpuscles as any other parasite, its growth and development in those corpuscles, its nourishment and sustenance on the material of the corpuscles, and finally its destruction of the red corpuscles, as any other parasite would do when fastened on an animal or vegetable body. This destruction of the red corpuscles of the blood explains many, if not all, of the pathologic changes resulting from malaria, as organic changes in the liver, spleen, blood and venous tissues. It explains the chills, the fevers, the congestions and irregularities of circulation of malarial fever.

The plasmodium malariæ of Laveran is probably the most certain diagnostic of malaria when found in the blood.

Another very interesting question in this connection is the channel through which the malarial plasmodium is carried and conveyed into the system, whether through the atmosphere or water, or both. Formerly it was the professional opinion that the air was the channel through which it was conveyed. At present the trend of professional opinion tends to the view that water is the principal channel. Experiments instituted by many observers in many localities go to show that water certainly is a common carrier of the malarial parasite. These experiments show that in malarial regions persons using surface water, as that of spring or wells or streams, are exceedingly subject to malarial poisoning, while the same persons when made to use water from the deep reservoirs of the earth, as for instance, from artesian wells, are entirely free of all malarial infection. In other words; that it is the water from the earth's surface saturated with the débris of vegetable decomposition that contains and carries the malarial parasite.

Treatment.—It is conceded by all authorities that malaria enters the human system either by means of the air we breathe or the water we drink, or through both of the channels. For many years it was the accepted opinion that the air was the only common carrier of malaria. More recently carefully conducted experiments go to prove that water is the true carrier of malaria. If this be true it is obvious that we have at hand a far greater command of the situation in instituting measures for the protection of the human system against malarial poisoning. Frost and malaria are deadly enemies. When water sinks in its temperature to 32 degrees F. all malarial germination and life ceases, and after that water in the most malarial districts may be imbibed with impunity. Our water supply, according to the latest and most reliable scientific experiments, is to be the field of future hygienic investigation and operation in regard to the question of malaria and its entrance into the human system. Formerly drainage, the clearing up of swampy lands, tillage and improvement of the soil were the only hope of those residing in malarial districts. Since the discovery that water, if not the chief, is a common carrier of malaria, another and a renewed hope has arisen for those who are yearly subject to malarial influences, and that hope lies in a supply of purified water. If this be true, and all the evidences point in that direction, those who reside in the most deadly malarial districts may not despair, for by a little expense and not much labor, they can command the situation. It is very well established that malarial-infected water is confined to that on or near the surface of the earth. The deep reservoirs of the earth, which can only be penetrated by artesian wells, are free from malaria. But the expense of this resource renders it impracticable in many sections. But a resource available for the poorest and humblest in malarial regions is that of *sterilized water,* which has been subjected to the boiling point. But sterilized water, while its malarial parasites have been killed by the action of heat, nevertheless contains a certain amount of dead organic matter. From this objectionable element sterilized water can be made free by filtration.

Certain products of cinchona undoubtedly possess prophylactic power in addition to their curative properties. Quinin, its most important product, must be regarded, in addition to its multiplicity of medicinal properties, as an antidote to the malarial poison. And it has a claim to be ranked among the chemic antidotes. It arrests fungoid generation and growth by arresting all fermentative action in the blood. If the article quinin possesses the chemic property of accomplishing these objects it is entitled to be ranked among the antidotes for fungoid growth and fermentative action in the blood.

Its well known antipyretic powers in fevers are no doubt due to its remarkable antifermentative action.

Ten grains of the bisulphate taken in a glass of sherry wine before breakfast and previous to all exposure, when combined with the systematic use of sterilized water, will insure protection.

In the treatment of these diseases the important question arises, Can we by any known means modify the types of these fevers, by rendering them milder, and at the same time reduce their rate of mortality?

These are questions of paramount importance. I believe that by proper treatment these objects can be accomplished.

Quinin is the only certain and acknowledged antidote to the parasite of malaria.

But its efficiency as such depends absolutely upon the manner of its administration. Given according to rules it is a remedy of great precision. Given according to other methods it is entirely insufficient. There is much in the manner of giving remedies, and even the most valuable and potent may fail if given without proper method or system.

Forty years ago it was the custom to give quinin in malarial fever in doses of one grain every hour, or two grains every two hours, or three grains every three hours. Well do I remember the utter inefficiency of the remedy in modifying the type or reducing the rate of mortality. By this method the system failed to get sufficient of the antidote to destroy the parasite. In giving this antidote it becomes somewhat a question of mathematical calculation. We must gauge the quantity of our antidote to the amount of parasite in the system and the gravity of the case. Not only this, but the remedy should be given in large doses at longer intervals, rather than in small doses at shorter intervals. Thirty grains given in ten-grain doses three times a day is far more efficient in the remittent forms of fever than the same quantity given in two-grain doses every two hours. Twelve-grain doses morning and evening act more decidedly than twenty-four grains divided into broken doses every two hours. In decided forms of fever quinin should never be given in small doses, however often repeated. I have repeatedly seen cases in which one or two grains were given every one or two hours, without the least effect, when the same quantity per diem given in three equal parts three times a day changed the entire aspect of the case promptly.

For many years I have taken every opportunity to experiment with quinin in malarial fevers with a view of ascertaining in each form and stage of fever the quantity of quinin that was necessary to act as a destructive antidote to the malarial parasite.

I found by experiment that in the treatment of intermittent fever fifty grains of quinin given within thirty-six hours preceding the chill, was the maximum quantity required to arrest the disease. Thirty grains given within twenty-four hours preceding the chill in a majority of cases would arrest it, but not invariably. I found that five grains of acetanilid given just before the chill invariably modified the chill and resulting fever. In regard to chronic chill and fever, I found ten grains of quinin given in sherry wine before breakfast and Warburg's tincture in full doses after dinner and supper, almost invariably acted as preventives.

Quinin should never be given in pill form, as they are slow to dissolve and frequently do not dissolve in the stomach at all. It is preferable to give it in solution or powder as the bisulphate, or lastly in fresh capsules. I am satisfied that a certain proportion of cases are lost because of the insolubility of pills. I have repeatedly seen in my practice cases grow worse daily under the use of the quinin pill, that improved rapidly when the solution or powder was substituted. Then again in cases of great emergency, where we desire prompt action, in my experience, the bisulphate is the most certain form in which it can be given.

In the application of this remedy as an antidote to the malarial plasmodium, we must be governed by fixed laws and practical rules, or failure will be the result.

It is certainly true that we have all grades and types of malarial disease from the mildest to the most malignant, and we must adapt our measures to these different grades or we cannot have success. I found in my experience in the past thirty years, in about one hundred and seventy-five cases of malarial fever beginning suddenly, with a decided chill and followed by a temperature running up rapidly to 105 or 106 degrees, with intense neuralgic pains, sixty grains of quinin per day of twenty-four hours given in divided doses of ten grains every four hours would invariably arrest the attack in seventy-two hours and frequently less time. Thirty grains per day would prolong the attack to five or six days, especially if given in three grain doses every two hours. Twenty grains per day would prolong the attack between one and two weeks, and fifteen per day would prolong it from three to four weeks.

These facts teach us the important lesson, that to obtain the full antidotal effects of quinin, we must saturate the system with the remedial agent promptly in quantities sufficient to kill every malarial germ in the system. Otherwise if a single germ is left in a living state it becomes the nucleus for rapid germination and multiplication, and our work must be done over again.

The prolonged form of malarial fever, if neglected or improperly treated, is certain about the third or fourth week to pass into the adynamic stage.

The questions arising in treating this form of fever are, whether its type can be modified, its progress curtailed, and the adynamic stage be averted.

I can with the utmost certainty answer this question in the affirmative. But in our treatment we have persistent disease to contend with, and our treatment must be systematic, constant and active, and as sure as we lapse into an expectant method, or relax our efforts, the progress of the case gains on us every hour and it will pass into the adynamic stage, there will be increase of temperature, of pulse rate, and the rhythm of fever will disappear and it will assume a continued form, and then the stage of delirium appears, with all other toxic symptoms. If we expect success in our treatment the antidotal treatment must be commenced from the earliest stage, and never relaxed to the end. Twenty grains of quinin divided in three equal parts given three times a day will maintain the case in its simple type, keep the temperature down to 101 degrees in the morning and 102 degrees at evening, prevent typhoid symptoms, or other complications and finish up the case about the third or fourth week, but 30 grains per day will do much better.

It is surprising how the system comes to tolerate these full doses of quinin when long continued and which are followed by no evil results. I have given continuously for a month 10 grains three times a day, and after the first few days all unpleasant effects on the nervous system would cease, where there would be a complete state of tolerance, and the remedy would act as a pleasant sedative tonic and antipyretic.

EXPERIMENTS WITH SERUM FROM SYPHILITICS.*

In *La Médicine Moderne* of November 28, 1896, is an interesting paper by G. Maréchal describing some investigations made by him into the artificial production of immunity against syphilis, and an account of a micro-organism which he thinks to be the specific cause of the disease. The paper is too long to be reproduced *in toto*, but we give its substance in the extracts presented below.

" Of all the infectious diseases, syphilis is the one whose pathogenesis has remained the most obscure, because it is essentially a human disease and because we know neither its specific micro-organism nor its lesions in animals. We have studied it by auto-inoculations on ourselves, to the end that we might be immune to syphilis.

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*Translation by Dr. Chas. M. Blackford, Atlanta.

"To realize this immunity we had recourse to injections of syphilitic serum taken from seven patients.

"After injecting the serum from a syphilitic subject whose affection was of about twenty-five years' standing, we inoculated ourselves with that of two other patients who had contracted the disease about five years before, then of a person whose indurated chancre had made its appearance only about three weeks and finally from one of three months. The last injections that we gave ourselves were from a patient infected with syphilis for seven and one-half months, and who had ulcers scattered over his back and legs.

"On the third day, our attention was attracted to a phenomenon which has enabled us to measure approximately the virulence of the serum injected—the injection of 2 c. c. of serum from a patient with general paralysis of syphilitic origin produced in about an hour swelling of a gland in connection with the lymphatic region in which was the seat of the inoculation. We set up this glandular reaction every time we injected a virulent serum taken from a syphilitic subject. On the other hand, when we injected normal human serum, an adenitis was never produced. Moreover, this glandular reaction manifested itself after a somewhat shorter time, persisted longer, and was more soft and painful as the serum was more virulent. But when this virulence was raised above a certain degree, the adenitis had a tendency to become hard, and would not subside for three or four hours instead of one hour after the inoculation. Persuaded that this glandular tumefaction coincided with an afflux of phagocytes into the gland, that the dispersion of the tumefaction indicated that the phagocytes had digested both the microbes and the toxins, and that they are carried away by the current of the circulation, we thought that our degree of immunization rose progressively, and that after each inoculation we were more protected from syphilis as the adenitis disappeared.

"The injection of a serum obtained from a patient who had been infected with syphilis for seven months and who presented syphilitic ulcers scattered over his body, set up in us after a dose of 2 c. c., an axillary adenitis which persisted for about two days; we caused it to disappear by an injection of serum from a horse. Thereafter when an adenitis took too long a time to subside we had recourse to the serum of a horse.

"But this normal curative serum made us rash: the injections of the seven months' syphilitic serum, repeated and in larger doses, practiced on the right buttock and in the right sub-umbilical region, brought on a hard and indolent adenitis that the serum from the horse could not make disperse. Our serum, obtained from bleeding the arm, caused the gland noticeably to diminish, but without definitely triumphing over the swelling or the glandular induration.

"Seven days after these last inoculations of the seven months' syphilitic serum, a hard button appeared on the right buttock: we caused it to disappear by one injection of the horse's serum in the very center of the button; a second indurated button appeared some days after on the right buttock and disappeared same way under the influence of the horse's serum; a third indurated button manifested itself in the right sub-umbilical region, and ulcerated in spite of injections of the horse's serum; the indurated chancre was formed.

"We now anxiously watched ourselves until the appearance of the roseola, which was localized in Scarpa's triangle. The inoculation with the seven months' syphilitic serum had taken place on the 21st of January; the indurated chancre had appeared on the 28th of January; the localized roseola did not commence until the 21st of March; the whole region of Scarpa's triangle was discolored from a pigmentary point of view; the surface of the skin presented a peach-blossom tint, which grew gradually fainter from the base to the apex of the triangle; this roseola corresponded with an adenitis that also grew less marked as it involved glands nearer the apex. After this miniature manifestation of secondary syphilis, we observed no generalized roseola, no generalized adenitis, no alopecia in thin spots, no syphilides, no nocturnal headaches and no albuminuria. The urine was normal, except that the amount was reduced to 12 grammes in twenty-four hours for two or three months. The blood was normal, the injection of our serum, intended to set up a glandular tumefaction, produced on the contrary the rapid disappearance of the adenitis provoked by the injection of the syphilitic serum. To sum up from a clinical stand point, syphilis is essentially glandular; the first period, mono- or pauciglandular, may in turn be divided into three phases: the indurated gland, the indurated button, and the indurated chancre. The second period, multiglandular, reveals itself as a generalized roseola.

"As we have never observed the glandular reaction that is provoked by the inoculation of a virulent syphilitic serum, excited by a normal human serum, we consider this phenomenon as the pathognomonic sign of the virulence of the blood of the syphilitic subject. As the idea of virulence implies a micro-organic origin, we have sought to discover if the specific microbe of syphilis exists in the blood of those afflicted with the disease."

The author then describes a micro-organism that he found in the blood of a patient. He says: "In an unstained preparation, the bacilli took the form of little clubs almost broader than long, rounded at the extremities and much constricted in the middle; one would say they were two cocci put side by side but joined by a very narrow segment: one can therefore call them bacilli pseudo-diplococci. They are immotile.

" This bacillus grows on human blood serum, acetic fluid, gelatine and urine, in which last the growth is peculiar and, as claimed by the author, characteristic. It grows best on a mixture of gelatinized serum of a horse mixed with one-third human serum."

M. Maréchal claims that the same reactions follow injections of this bacillus as of syphilitic serum.

NECESSITY OF STRICT DIETING IN SKIN DISEASES.

Brocq (*Journal de Méd. et de Chir.*, March, 1896) insists that not only are there certain kinds of food which provoke immediate eruptions of the skin--such as sea fish, oysters, preserved meats, game, pork, cheese (which very often causes acne and folliculitis), certain acid fruits, strawberries, raspberries, gooseberries, cabbage, nuts, etc.

—but that others act with a more delayed effect. The noxious effects of alcholic liquors, beer, wine, coffee, and tea are not generally admitted, yet they often cause urticaria. These ill-effects are supposed to be caused by a veritable intoxication of the system, which they produce by their absorption, or by provoking some trouble of the stomach and intestines, and consequently influencing the whole organism. These eruptions can also occur from the elimination of irritant elements through the skin; in this case not only the food is concerned, but also the manner of preparing it. Certain persons cannot eat butter, especially if it is adulterated, and fat, oil, spices and under-done meat produce ill-effects upon others. Moreover, individual idiosyncrasies must be considered. These are not always the same during life, as sometimes we meet people who can at a certain time support a given substance, which, later, without any ascertainable reason, may cause an eruption.

It is generally easy to obtain from a patient a promise to abstain from food that produces ill-effects, no matter how pleasing it may be in taste, if these effects are immediate: but when the effects become apparent only after the lapse of considerable time, as in gout or rheumatism, it is hard to obtain such a promise. Yet it is reasonably certain that effects upon the skin are often produced as remote in time from the ingestion of the deleterious article of food as in the case of these two named diseases, although unfortunately for science, this remote effect is denied by the majority of dermatologists.

Observation has shown that if alimentation is defective either through excess, want, bad qualities of the ingesta or non-adaptation of food to circumstances and climate, either the food is badly digested, badly absorbed, and especially badly elaborated in the body, and the divers excretory functions become insufficient in their workings. In such cases, little by little, more or less toxic excremental matters are accumulated in the body, impressing upon the organism a seal of vital decadence and morbid vulnerability. It is known that individuals leading sedentary lives who eat heartily of substantial food, and in addition are moderate drinkers, or who are fond of tea or coffee, are subject to gout or rheumatism. If this is granted, why should the skin alone possess an immunity to the slow toxic effects of the gradual accumulation of excremental poisons? Frequently, in people of either hereditary or acquired gouty diathesis, are found cases of bullous or erysipelatous eczema and limited neurodermites, alternating with visceral and articular manifestations. Chronic alimentary intoxication must in all cases be considered the most important cause of the cutaneous symptoms.

The same considerations can be applied to many cases of nervous excitability, alimentation playing a more important part than is generally supposed possible. In a series of cases extending over a number of years, Dr. Brocq found excessive coffee-drinking to be the cause of many pruriginous dermatoses. In many of these cases coffee took the place of food to a large extent, and the patients were extremely thin with trembling of the extremities. Nervous affections of the skin, with or without eczema, were especially numerous.

It then seems logical to advise arthritic people to observe a strict diet if they wish to avoid annoying eruptive attacks. They should particularly abstain from coffee, liquors, wine, beer, dark meats, and acid vegetables and fruits. Persons affected with acne must avoid salty cheese, preserved meats and fish. These precautions must be particularly observed when an attack is imminent because of development of the morbid predisposition. The articles of food mentioned can play a rôle of accidental cause under these conditions and have an immediate pathological effect.—*Med. and Surg. Reporter. The Cincinnati Lancet-Clinic.*

PRACTICAL POINTS IN ELECTRO-THERAPEUTICS.

General practitioners desiring to use electricity in their practice, but possessing practically no knowledge of the electro-therapeutics, will do well to read, study and learn the following points:

The faradic or interrupted current cures disease mainly through physiological and mechanical processes, producing no appreciable chemical effect in the tissues.

In each faradic battery there should be two coils—primary and secondary.

The current from the primary coil has greater quantity and produces greater mechanical effects, but lacks penetrating power and is more useful in superficial troubles, particularly where mechanical efforts are desired.

It is also of service in internal treatments for many vaginal and uterine diseases.

In the primary current there is some difference in polarity, the positive pole producing greater sedation and the negative pole greater stimulation.

The secondary coil produces a current having much greater penetrating power than the primary current.

It will more easily overcome resistance on account of its greater tension, and is to be preferred to the primary current in treating deeply seated conditions.

There is no appreciable difference in polarity in the current from the secondary coil.

The current from the secondary coil is much more pleasant in its effect, particularly to nervous subjects.

In the direct galvanic current there are no interruptions to the current as in the physiological and mechanical effects.

There is no sensation to the current beyond a feeling of numbness and burning beneath the electrodes.

In general terms, it may be stated that the faradic current is to be preferred in muscular troubles and the galvanic in nervous diseases.

The galvanic current will produce a greater degree of sedation or stimulation.

The galvanic current should be used to stimulate the absorbents, to remove effusions, morbid growths, callosities, tumors, facial blemishes, superfluous hairs, etc. In these conditions the faradic current is practically powerless.

The positive pole of the galvanic current is much more sedative and the negative pole much more irritating and stimulating.

Electrolysis and cataphoresis can only be used with the galvanic current.

To produce the most pronounced sedative effect and allay irritability make stabile applications of the positive pole, galvanic current.

To produce the most marked irritation, use the negative pole of the galvanic battery, or reverse the polarity frequently.

Electricity has a decidedly refreshing and soothing effect upon the entire nervous system, and is of great service in nearly all nervous diseases.

Either faradic or galvanic current will equalize the circulation, increase the flow of blood to the surface and extremities, and improve nutrition and assimilation.—*Electro-Therapeutist.*

TREATMENT OF ACUTE SORE THROAT OF NON-DIPHTHERITIC TYPE.

Lyon, in the *Revue de Thérapeutique Médico-Chirurgical* of May 15, 1896, recommends the following treatment in sore throat not dependent upon a specific diphtheritic infection: Internally small doses of one of the salts of quinine or of antipyrin, either in cachet or in solution. Generally cachets are swallowed with too great difficulty by children:

℞	Antipyrin	15 to 45 grains.
	Water	3½ ounces.
	Syrup	1 ounce.

A teaspoonful three times a day.

Or,

℞	Neutral sulphate of quinine	7 to 15 grains.
	Syrup	6 drachms.
	Syrup of codeine	6 drachms.
	Distilled water	3½ ounces.

Teaspoonful at three- or four-hour intervals.

Sometimes, if there is a rheumatic taint in the case, benzoate of sodium and salol are useful. The dose of the salol should be large, and it is claimed that it will relieve the pain, reduce the temperature, and exercise a general anesthetic influence which is of value. Where the sore throat is accompanied by marked systemic disturbance, particularly with disorder of the digestive tube, it may be well to give benzo-naphthol, and, as a tonic, cinchona or alcohol.

The local treatment he recommends is to allow a small piece of ice to melt in the mouth, or to use a gargle of cocaine as follows:

℞ Boric acid	½ ounce.
Hydrochlorate of cocaine	7 grains.
Glycerin	1½ ounces.
Water	10 ounces.

Or the tonsils, if they are inflamed, may be painted with glycerite of menthol and cocaine, such as hydrochlorate of cocaine 4 grains, menthol 15 grains, olive oil 1 ounce.

Compresses soaked in hot water may also be put about the throat and covered by gauze and rubber dam.

Locally antisepsis may be maintained by the use of gargles which may contain boric acid, salicylic acid, carbolic acid, or guaiacol.

The gargles which he thinks are most useful in ordinary sore throat are as follows:

℞ Salicylic acid	½ to 1 drachm.
Borax	½ to 1 drachm.
Honey	1 ounce.
Distilled water	8 ounces.

Or,

℞ Borax	2½ drachms.
Hot water	6 ounces.
After solution, add:	
Tincture of myrrh	1 drachm.
Syrup of mulberries	1 ounce.

As a local application by means of painting, a mixture of equal parts of guaiacol and glycerin may also be employed. The guaiacol acts as a local anesthetic. After the patient is convalescent, care must be taken that relapse does not take place. The antiseptic gargles should be continued, and the following prescription may be given internally to aid this purpose:

℞ Crystalline carbolic acid	1 drachm.
Alcohol	6 drachms.
Essence of peppermint	15 grains.

Eight to ten drops of this may be given in a glass of water.—*Therapeutic Gazette.*

THE X-RAY IN SURGERY.

At the late Pan-American Medical Congress, in Mexico, Dr. Carl Beck, of New York, read a paper on this subject. He stated that the rays had been successfully used in the detection of splinters of metal and glass, bullets, needles, etc., which can be easily photographed or seen by the fluoroscope. It is also easy to perceive topographic-anatomical representations of the skeleton, the position of the fetus in utero, deficiencies of bones, deformities, dislocations, callous formations and complications in fractures, and such diseases of joints as pseudarthrosis, ankylosis, hypo-peri and exostosis, and ostitis and osteomalacic processes are representable. The area of ossification in rachitis, the dentation line in hereditary syphilis, caries of bones, tissue change in arthritis, osteophytes, calcination, ossification of cartilage, and tumors of the bones can be recognized. The case in which Koenig recognized a sarcoma of the tibia by the light mass of a lobular structure contrasting with the dark diaphysis of the tibia was cited. Suspected green-stick fractures, as well as the manner in which it is treated, may be demonstrated by reproducing the limb, together with the bandages, splints, etc. This Roentgen picture may thus become a valuable document in a medico-legal way. Neusser was quoted as having proved the phosphates as well as other calculi in the urine by the rays. The great obstacle in the diagnosis being the situation of the bladder in the bony pelvis, which prevents the permeation of the rays. It is claimed that renal calculi, as well as gall-stones could be diagnosed, but the essayist has been unable to demonstrate this. He has photographed the skull, and recognized foreign bodies in it, as well as sklerosis of the arteries, while calcified deposits in the lung, the remainder of old, healed tuberculous ulcers, could be plainly seen. The organs, which are kept moving by the respiratory and circulatory acts, can be seen with the aid of a fluoroscope, but cannot be photographed. The only method of recognizing effusions is by finding a translucent space between two organs, and an abscess might thus be suspected. Regarding the curative effect of the rays in zymotic diseases, Dr. Beck stated that the vitality of pathogenic bacteria is not impaired by the rays, even if the exposure lasts for several hours.—*Ex.*

PURULENT DISCHARGES FROM THE MIDDLE EAR.

This is a subject which is deserving of much more attention from general practitioners than it usually receives. Such cases, if neglected, are not only a menace to hearing but even to life itself, particularly in children, in whom the part of the temporal bone between the aural cavity and the brain is often as thin as tissue paper. The treatment of chronic suppurative otitis media is discussed in a practical manner by Norton L. Wilson in the *New York Medical Journal* of March 28. The first point, he says, is the thorough removal of all secretions and débris. This is usually accomplished by syringing with slight force through the external meatus an aqueous solution of common salt or boric acid, twelve to sixteen ounces three or four times a day. If the discharge is offensive, Dr. Norton uses a five per cent. solution of permanganate of potassium, a one-half per cent. solution of carbolic acid, or even corrosive sublimate $\frac{1}{1000}$. The latter should not be intrusted to the patient himself. After cleansing the cavity in this manner the writer instills into the ear a twenty-five per cent. solution of neutral hydrogen peroxide and forces out any remaining pus with the Politzer bag. If this procedure fails, inflation may be performed with the Eustachian catheter, and any loose material in the cavity of the tympanum can be cleared out with a medicine dropper. Where syringing is contraindicated on account of giddiness and other unpleasant effects, we may try mopping out the middle ear with absorbent cotton and dropping in a little alcohol. If the perforation is too small for thorough cleansing of the cavity, it is better to enlarge the opening. All débris, exudations, polypi, granulations and necrosed bone must be removed, the general health looked after, and above all any nasopharyngeal troubles should receive due attention.—*Denver Medical Times.*

INFECTIOUS VULVO-VAGINITIS AND PURULENT OPHTHALMIA IN CHILDREN.

Dr. Henry B. Sheffield contributes an interesting article on the above subject to a recent number of the *American Medico-Surgical Bulletin.* His conclusions, based on a study of sixty-five cases, are as follows:

1. Infectious vulvo-vaginitis in children is of gonorrheal nature; the diplococcus present in the purulent discharge is invariably identical with that of Neisser, decolorizing by Gram's method.

2. The infection can be conveyed through common privies, baths, beds, clothing, etc.

3. The symptoms accompanying the disease are far less severe than those described in most text-books.

4. Most of the complications are preventable.

5. The value of boric acid or mild silver nitrate solutions as prophylactics of purulent ophthalmia is very doubtful.

6. Silver nitrate in strong solution is a reliable abortive of purulent ophthalmia, if used in the very earliest stage.

7. The mere presence of gonorrheal discharge in a small girl, without injury to the genitalia, does not prove that rape has been attempted.

8. Physicians in charge of asylums, or similar institutions should be on their guard not to admit girls with vaginal discharge, unless they can convince themselves that this is not of gonorrheal origin.

9. The subject in question deserves a more careful study by the gynecologist, pediatricist, as well as by the general practitioner and medical jurist; and by their united observation we should in the near future be enabled to dispel any and all doubt as to the real nature of infectious vulvo-vaginitis in children—*Clinical Recorder.*

THE CUTANEOUS MANIFESTATIONS OF DIABETES. Prince A Morrow. (*Medical Record,* Vol. XLIX., p. 508.)

Affections of the skin occurring in diabetes may be divided into two classes, those which are of definitely diabetic origin (*diabétides* of French writers), and those which occur accidentally. In the former class are included pruritus, diabetic erythema, eczema, balanoposthitis, furuncles, carbuncles, gangrene, and xanthoma diabeticorum. The sebaceous and sweat glands are disordered, the secretion being generally diminished (asteatotis, anidrosis), but in a few cases increased (hyperdrosis). Allied to this defect is the falling out of the hair often observed, the nails, too, are often cast off, owing to the suppuration of the matrix. The eruptive disorders, erythema and eczema, are preceded by pruritus, and are probably in part due to traumatism (scratching). Eczema vulvæ is characterized by great thickening of the mucous membrane, a dark-red color, and dry, glazed appearance, and a similar thickening and infiltration is seen in diabetic balanoposthitis and its resulting phimosis. Diabetic gangrene may be either spontaneous or the result of slight trauma. It is usually moist, and occurs mainly in the old and obese, and the vessels are, as a rule, found to be pervious. Xanthoma diabeticorum has been recorded altogether in twenty-one cases, and its casual relation to the disease is shown by its involution as the glycosuria diminishes, and its reappearance as the sugar returns. The nodules are firm and of inflammatory nature, and are accompanied by subjective sensations of heat and itching. Of the accidental skin lesions in diabetes may be mentioned psoriasis, which has often been observed; dermatitis herpetiformis, of which four cases occurring in diabetics have been recorded (Winfield, *Jour. Cut. and Gen. Urin. Dis.*, November, 1893), and a peculiar bronzing of the skin described by v. Harndt (*Wiener Med. Blätt.*, 1896, p. 101).—WM. CECIL BOSANQUET.

A CASE OF HERPES ZOSTER OF THE RIGHT UPPER EXTREMITY (*Clinic Atlanta Medical College*).

This case of what was formerly called "shingles" affected a light mulatto girl of about ten years of age. There was a pale red patch with fine vesicles at edge of thenar eminence; a red, well-defined one, studded with shot-sized vesico-pustules, on skin over depression between extensors of thumb and index-finger; another on radial side of forearm, and a few ill-defined above the elbow. The disease is characterized by the occurrence of neuralgic pains in the points of eruption, often preceding the skin lesions, or pains referred to the spinal center. In this case the eruption appeared over the terminal filaments, chiefly of the radial and external cutaneous nerves. Lesions of the cord have been found in some of these cases. The disease is considered self-limited, the duration being ten days to two weeks. Ichthyol, three to four per cent., in collodion, is a good application. Morphine-collodion, local galvanism, etc., have been employed. M. B. H.

OXYGEN GAS IN NOSE AND EAR DISEASES.

Dr. George Stoker, of London, has called attention in a late paper before the American Laryngological Association, to the use of oxygen in ozena (syphilitic and chlorotic) and in chronic suppurative otitis media. He was induced to try it for these conditions from observing its curative effects upon wounds and suppurative surfaces in other parts of the body. The oxygen is contained in a mackintosh bag with two taps, one for inlet and one for outlet; it is combined with an equal part of purified air and the bag contains one cubic foot of the mixed gas. This amount is sufficient for about six hours' treatment. The nose piece is passed into one nostril and the other is plugged with cotton. In ear cases the terminal piece is placed in the external auditory canal. The oxygen should be allowed to pass into the nose or ear from three to six hours daily, with intervals of rest. The author reported four cases of ozena and suppurative middle ear disease treated and cured by this method. See *New York Medical Journal,* August 29, 1896.

FORMALIN AN APPROXIMATE SPECIFIC FOR RINGWORM.

An interesting editorial note has appeared in *Guy's Hospital Gazette* calling attention to a recent paper by Mr. Alfred Salter, on the treatment of ringworm by formic aldehyde, or formalin. This treatment is now so well known in Guy's, and has had such a conspicuous success, that it should be part of the ordinary practice of every old Guy's man. There seems no doubt that it is the almost specific treatment for the disease, especially in obstinate and hitherto incurable cases. And yet this discovery arose from the annoying fact that the inventor's cultivations of the ringworm microbe were all killed one night through his having left the stopper out of the formalin bottle. So do fates at times turn good out of evil. *The Therapist* (London), November 15.—*Journal American Medical Association,* January 2, 1897.

MEDICAL ITEMS.

WANTED.—Copy of the *Confederate Manual of Military Surgery.* Address this JOURNAL, stating price.

THE colored physicians of South Carolina have organized a State medical society.

THE next Pan-American Medical Congress will be held in Caracas, Venezuela, November, 1899.

THE Grady Hospital, Atlanta, has built a children's ward. The Hospital now contemplates a training school for nurses.

THE first number of the American Medico-Surgical Bulletin under the new management, has reached us. It is an improvement on the old. It is now issued as a bi-weekly.

WRITERS ought to be more careful in the selection of the titles of their articles. No one can read everything, hence the title, even if it do not tell the whole tale, at least should not be misleading.—*Pediatrics.*

The next meeting of the American Medical Editors' Association will be held in Philadelphia June 1st and 2d. Dr. Hobart A. Hare, of Philadelphia, is President; Dr. H. Bert Ellis, of Los Angeles, Secretary.

A FRIEND writes: "*The Atlanta Medical and Surgical Journal* is one of my favorites. I became partial to it when it was under the management of Dr. Gray. You are doing good work and making a good journal. I hope you have a host of appreciative readers." Thank, doctor, thanks!

DR. H. P. COOPER and Dr. W. S. Elkin are preparing to erect in Atlanta a sanitarium for the reception and treatment of surgical cases. A lot has been secured and plans drawn, and work on the building will begin at an early date. It is expected to be completed in about six months.

AT A recent meeting of the Chicago Gynecological Society, the paper of the evening was upon the "Treatment of Hemorrhoids." In the course of the discussion, an eminent member of the society prefaced his remarks with these words: "Gentlemen, the rectum is coming to the front."—*Ex.*

THE Fort Wayne (Ind.) *Medical Magazine* and the *Journal of Medical Sciences,* published in the same place, have consolidated their fortunes and destinies, and hereafter will appear as the *Fort Wayne Medical-Journal Magazine.* A very wise step, which might be imitated with advantage in other places.

THE *Medical News* says that evidences of degeneracy are beginning to appear even in medical journals. The most recent and mortifying example is presented in the advertisement of a semi-monthly journal which lately offered a hundred-dollar bicycle for the person sending before a certain date the largest number of subscriptions at $2.00 per year.

EXPERTS AND EXPERTS.—Client (to lawyer)—I'm afraid the physician's testimony will convict me. Lawyer (reassuringly)—Don't be alarmed about that. I'll read up a little about poison in the stomach, and in ten minutes I'll have the doctor in a cold sweat and make the judge and jury think he is a hired perjurer.—*Druggists' Circular.*

NOTICE TO MEMBERS OF THE STATE MEDICAL ASSOCIATION.—You will get a request for a paper for the next meeting. Please decide to write a paper, and go to the Macon meeting, which promises to be one of the best and most pleasant held. You can help make it a success.

UNDER the able editorial management of Dr. A. W. Stirling, the ATLANTA MEDICAL AND SURGICAL JOURNAL has gone forward many strides within the past few months. Dr. Stirling, in the capacity of editor *pro tem.* (in the absence of Dr. Grandy), has given eminent satisfaction, and the hundreds of friends of the JOURNAL and its editor congratulate Dr. Stirling upon the splendid way in which he conducted this JOURNAL.—*Atlanta Clinic.*

Which is quite correct and duly appreciated.

EVERY now and then we get a letter about like the following: "I never run any bills. I pay cash for everything I get. I did not order your journal this year." This in reply to a dun for the year's journal. A man who will take any journal—not ours alone, for there are others—out of the post-office regularly for eight, nine or ten months, then when asked to pay for it write a letter like the above, has a soul smaller than a mustard seed, and his honesty could not be found in a thousand years' search with a microscope.—*Texas Health Journal.*

THE fifth annual meeting of the Tri-State Medical Society of Iowa, Illinois and Missouri, will meet in St. Louis, April 6th, 7th and 8th, 1897. A large number of valuable papers will be read. Dr. Joseph Price, of Philadelphia, will hold the Surgical Clinic, Dr. James T. Whittaker, of Cincinnati, the Medical Clinic, and Dr. Dudley Reynolds, Ophthalmic Clinic. Dr. G. Frank Lydston, of Chicago, will entertain the members with an original story during one of the evening sessions. The officers are: A. H. Cordier, M.D., president; Hugh T. Patrick, M.D., vice-president; G. W. Cale, M.D., secretary, 4403 Washington Boulevard, St. Louis.

DEATHS OF GEORGIA PHYSICIANS.—Dr. W. T. Green, of Fort Valley, January 4th. Dr. J. H. Asher, of Atlanta, January 7th. Dr. R. W. Willis, of Madison, January 8th. Dr. Willis served in the Confederate army, under Stonewall Jackson. Dr. S. H. Freeman, near Lawrenceville, January 13th. Dr. Freeman was one of the oldest physicians in the State. He had practiced in Gwinnett and surrounding counties for fifty years.

DR. LOUISE D. HOLMES has received her certificate from the Board of Medical Examiners of Georgia giving her the right to practice. She is the first woman physician licensed in Georgia. *Medical Fortnightly.*

This statement is not true, though it has appeared in a number of journals. There were female physicians in Georgia long before this lady came here. Dr. Holmes has left Georgia and has been practicing for several months in St. Louis, the home of the journal above quoted.

IT SEEMS that there are certain members of our profession—some of them good men, and in every way, except their newspaper advertising weakness, strong men—who are given to periodical manias for advertising themselves in the daily press. Perhaps some new cure for hydrophobia, an idea obtained during a sojourn in Europe, creeps into their brain and they immediately, through the medium of cigars or a bottle of whisky, creep into the daily newspaper with a long account of a new discovery. A distorted blood cell found under the microscope, and they rush for a reporter.—*Denver Medical Times.*

THE annual dinner of the Atlanta Society of Medicine was held at the Aragon hotel on the evening of January 21st, and the occasion was immensely enjoyed by all present. A choice and elaborate menu was served, to which the doctors all did ample justice. Following were the toasts: The Atlanta Society of Medicine, by the president, Dr. G. H. Noble; The General Practitioner, by Dr. L. H. Jones; Specialism in Medicine, by Dr. S. G. C. Pinckney; Medical Journalism, by Dr. L. B. Grandy; The Surgery of To-day, by Dr. H. P. Cooper; Fads—Their Position in the Medical Economy, by Dr. V. O. Hardon; and The Profession of Medicine, by Dr. W. S. Elkin. Appropriate impromptu remarks were made and pleasing anecdotes related also by Drs. Gaston, Hutchins, Baird, Crawford, Duncan, Stirling, Wolff, Champion, Campbell and others. When the doctors dispersed at an early hour the universal feeling was that it was well to have been there.

GOLDEN WEDDING OF DR. AND MRS. JOSEPH LECONTE.—On Thursday, January 14, 1847, Dr. Joseph LeConte, of Macon, Ga., was married to Miss Caroline Nesbit, of Milledgeville. After an absence from Georgia for nearly half a century, Dr. and Mrs. LeConte returned to Milledgeville, January 14th, 1897, to celebrate their golden wedding. Joseph LeConte was born in Liberty county, Georgia, 1823. He graduated in the University of Georgia 1841, and studied medicine at the College of Physicians and Surgeons, New York, from which he graduated 1845. He located in Macon, where he practiced medicine three years. He then took up the study of the natural sciences, and in 1852 became Professor of Natural History in the University of Georgia, and later, (1857) he was called to the Chair of Chemistry in the University of South Carolina. Since 1869 he has been Professor of Geology and Natural History in the University of California. The occasion of the golden wedding was attended by a large number of relatives and friends of the aged couple, and handsome presents and telegrams of congratulation were received from many more. We trust the distinguished pair may still see many more anniversaries of their happy wedding.

A SHOWMAN'S STRATEGEM.—In the Cleveland *Plain Dealer* the manager of a traveling opera company tells this story: "I was on the road with a farce comedy company, and we put in two weeks in a certain town. We drew good houses all through the engagement. I don't think we had been there more than one night before the doctor nuisance began. There would come a hurried messenger from the box office to the stage manager with a request that he ask if Dr. Bolus, or whatever his name happened to be, was in the house, and, if he was, to send him to the box office at once. Of course the stage manager couldn't well refuse, and general attention was directed to the medical man, much to his satisfaction. We soon found out that the doctors who were so much in demand were very small medical fry.

"Well, we stood it for a few nights, and then an idea occurred to me. I took a walk up the main street until I came to a certain sign hanging over a stairway. I went up to the office indicated, and had a brief conversation with its inmate, ending it by handing him reserved seat tickets.

"That evening immediately after the first act and before any messenger from the box office had a chance to arrive, I stepped out in front of the curtain and held up my hand. Then in my gravest tones I asked:

"'Is Dr. Chizziold in the house?'

"Immediately a very tall colored man, with a bushy white head and huge silver mounted spectacles, arose in the audience and said:

"'Heah I is, sah.'

"The audience tittered, but I kept my gravity.

"'You are wanted at the box office at once, doctor, in a case which requires your immediate professional attention.'

"As the aged darky ducked to me and hobbled from the room the audience broke into a wild roar.

"Perhaps you will understand the cause of their merriment when I add that the old man was a corn doctor and probably the best known eccentric character in town. There were no more doctors called from that stage during our engagement."—*Factotum.*

BOOK REVIEWS.

THE PRINCIPLES OF THEORETICAL CHEMISTRY, with Special Reference to the Constitution of Chemical Compounds. By Ira Remsen, Professor of Chemistry in the Johns Hopkins University. Fifth edition, thoroughly revised. Lea Brothers & Co., Philadelphia and New York, 1897.

To the student of chemistry there is nothing so essential to his comprehensive grasp of the science as an intelligent appreciation of its fundamental principles, and that writer accomplishes the most in aiding him to learn who states these principles in a manner which enables the mind to easily grasp them.

The first seven chapters of the book are devoted to an exposition of the Laws of Combination. Beginning with the Law of Definite Proportions, in turn are explained the Investigations of Dalton, and the promulgation of his Theory, and the various methods for determining the Atomic Weights of the Elements. The seventh chapter is devoted to a consideration of Valency; this property is one that seems particularly difficult of comprehension by the student, and so clear and concise a description of it will aid materially in its being understood. The remainder of the volume is devoted to the study of the Constitution and Structure of Chemical Compounds, taking in turn the inorganic or those not containing carbon; and the organic, or those containing carbon; the monobasic acids; and the benzene derivations.

Chapter seventeen treats of the Physical Methods used for determining the constitution of chemical compounds.

Chapter eighteen is given up to a study of Chemical Affinity, while the concluding chapter deals with the relations between the chemical constitution and the properties of compounds.

This work will be a great aid to every student of chemistry, and will throw much light upon various portions of the science which have hitherto been either completely obscured from his mental vision or at least very hazy. M. A. P.

ESSENTIALS OF PHYSICAL DIAGNOSIS OF THE THORAX. By Arthur M. Corwin, A.M., M.D., Demonstrator of Physical Diagnosis in Rush Medical College, etc. Second edition, revised and enlarged. W. B. Saunders, Philadelphia, 1896. Price $1.25.

The necessity for a second edition of this work shows the need of clear and concise presentation of medical facts for students; and further that when such a work appears it is appreciated. It is essentially a work for the class-room, calling attention to cardinal principles, and leaving for further study the more elaborate theories of the subject; this fixes facts upon the mind, without clogging the memory with burdensome speculations.

The arrangement of the subject-matter is good, and when used to follow the demonstrator of physical diagnosis, it will be of invaluable benefit to the student.

The divisions of the work include: (1) Topography of the Chest; (2) Landmarks of the Chest; (3) Methods of Physical Diagnosis; (4) Physical Signs Common in and Peculiar to each Disease of the Chest.

The author has wisely given some space to a consideration of the *Pulse,* a subject often slurred over in many works otherwise good. A careful perusal of this portion will be of advantage to practitioner and student alike.

M. A. P.

THE PRACTICE OF MEDICINE. A Text-book for Practitioners and Students with Special Reference to Diagnosis and Treatment. By James Tyson, M.D., Professor of Clinical Medicine in the University of Pennsylvania and Physician to the Hospital of the University; Physician to the Philadelphia Hospital; Fellow of the College of Physicians of Philadelphia; Member of the Association of American Physicians, etc. In one volume, pp. 1,174; illustrated. Price $5.50. P. Blakiston, Son & Co., 1012 Walnut street, Philadelphia.

This book is the result of several years' labor. "It has taken some time, because it represents almost purely personal work, which has been frequently interrupted. It does not pretend to be based on my personal practice alone." It is a work of the size and nature suitable for the student, but is sufficiently comprehensive to be of value also as a reference work for the practitioner, though it cannot compare with modern medical encyclopedias for the latter purpose. Although it was not at first the author's intention to illustrate the text, he has found it necessary to produce about 100 charts and other drawings, mostly of a somewhat unpretentious nature.

The author first defines the disease under consideration, then gives a succinct sketch of its history, before proceeding with the etiology, morbid anatomy, symptoms and treatment. Each of these receives what seems to be a very proper share of his attention, according to its importance. We have observed nothing to which exception can be taken, and the book we consider to be one which can be fairly recommended to those in need of such a work. A. W. S.

AUTOSCOPY OF THE LARYNX AND THE TRACHEA. By Alfred Kirstein, M.D. Authorized translation by Max Thorner, A.M., M.D., Cincinnati, O., Professor of Clinical Laryngology and Otology, Cincinnati College of Medicine and Surgery; Laryngologist and Aurist, Cincinnati Hospital, etc. Twelve illustrations. Extra cloth, 75 cents, net. The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street, Philadelphia.

The author here describes the new method of direct examination of the larynx and the trachea without the reflecting mirrors in common use. The Autoscope consists essentially of a well illuminated (electricity) tube mounted on a long spatula, which depresses and controls the tongue. With this instrument, and the patient's head in proper position, direct inspection of the larynx may be made and a true picture of the parts obtained, instead of a reflected and reversed image. The author describes the instrument and the technique of its application. The translator considers the "autoscopic examination of the air passages as developed by Kirstein the most important addition to our technical resources made since the discovery of the laryngoscope by Garcia." We believe that this instrument has a great future. The chief obstacle to its use will be the intolerance of most throats.

We cannot but object to the name given to this method. This is not *autoscopy* at all, and it is no more proper to apply this term to direct inspection of the larynx than to a similar direct examination of the middle ear or of the interior of the bladder. It is, however, *laryngoscopy* by a direct method and the apparatus is a true laryngoscope.

THE JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

With the issue of January, 1897, Number 1, Vol. XV, this valuable journal appears with a new editorial staff and new publishers. Dr. Jas. C. Johnston and Dr. Geo. K. Swinburne are the editors, Dr. Johnston appearing as acting editor. The collaborators are Louis A. Duhring, M.D., John A. Fordyce, M.D. (formerly editor), Edward L. Keyes, M.D., Prince A. Morrow, M.D., Robt. W. Taylor, M.D., and Jas. C. White, M.D. The editors are bright and able men in their field and the names of the collaborators afford a sufficient guarantee that the standard of the journal will be of the highest. This is the organ of the Dermatologists, Syphilographers and Genito-Urinary specialists in America. The best in these branches is published there, and it is the journal of reference for those interested in these subjects.

The scope of the *Journal* will be enlarged to admit more from other periodicals, and editorials will be added.

We hope the cover of the next issue will be in the old distinctive color, and that the new editors will demand extra vigilance upon the part of the proof-readers with a view to the avoidance of typographical errors, which so often mar medical papers. We wish the *Journal* increased success, and advise all who are interested in the subjects treated in its pages to become its active supporters.

INTERNATIONAL MEDICAL ANNUAL.

E. B. Treat, publisher, New York, has in press for issuance early in 1897, the *International Medical Annual*, being the fifteenth yearly issue of that well-known one-volume reference work. The prospectus shows that the volume will be the result of labors of upwards of forty physicians and surgeons, of international reputation, and will present the world's progress in medical science.

The volume will contain about 700 pages. The price will be the same as heretofore, $2.75.

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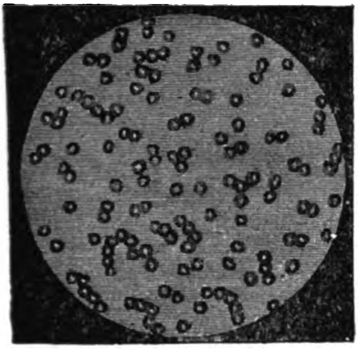

Micro-photographed by Prof. R. R. Andrews, M.D.

And the same overwhelming clinical demonstrations have also proved that the Vitality and Power of Bovine Blood can be and are *PRESERVED*, unimpaired, in a portable and durable preparation, sold by all druggists; and known as Bovinine. Microscopic examination of a film of Bovinine will show the LIVING BLOOD CORPUSCLES filling the field, in all their integrity, fullness, and energy; ready for direct transfusion into the system by any and every mode of access known to medical and surgical practice; alimentary, rectal, hypodermical, or topical.

In short, it is now an established fact, that if Nature fails to *make* good blood, *we can introduce it.* Nothing of disease, so far, has seemed to stand before it.

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SAFEGUARDS AGAINST SUBSTITUTION.

Fellows' Hypophosphites is dispensed in bottles containing 15 oz. by measure—the address, Fellows & Co., St. John, N. B., blown on—the name J. I. Fellows, St. John, N. B., in watermark upon the yellow wrapper; it is hermetically corked, and sealed with crimson capping; is heavy, slightly alkaline, has a pleasantly bitter taste, and deposits a flocculent brown precipitate of Hypophosphite of Manganese when left undisturbed for forty-eight hours.

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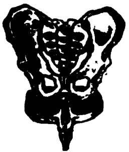

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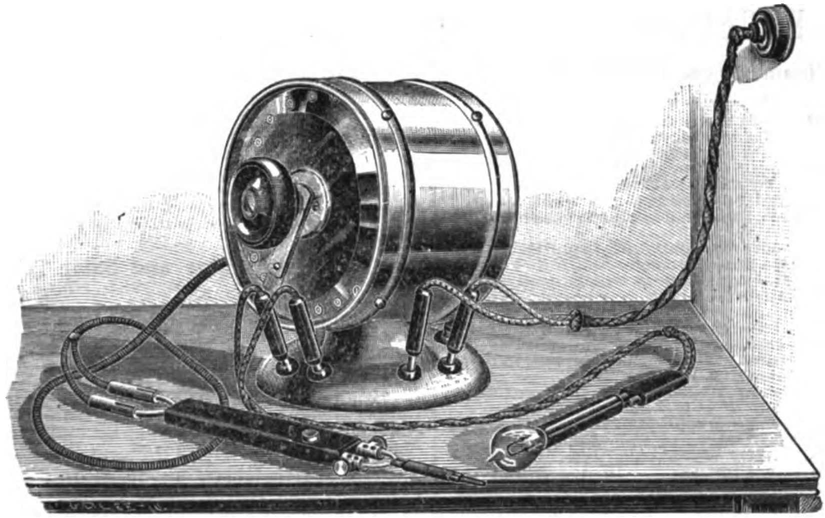

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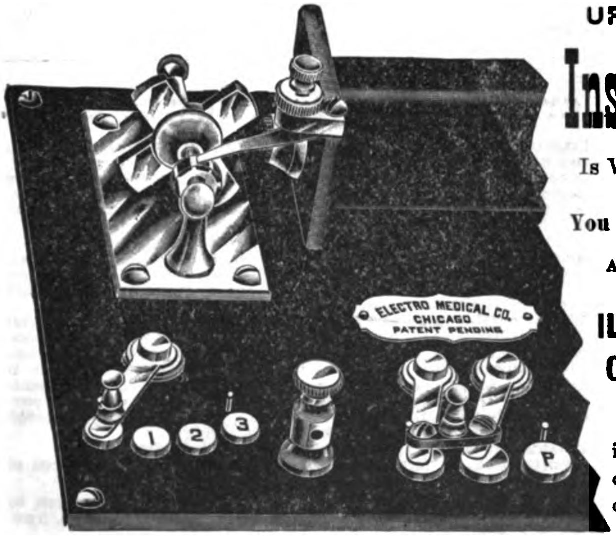

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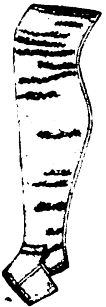

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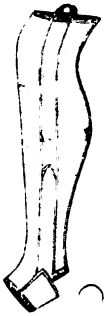

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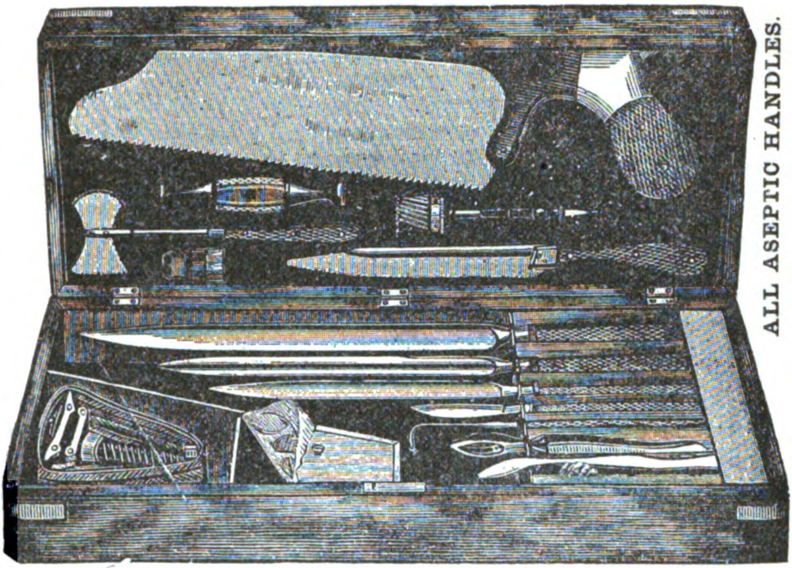
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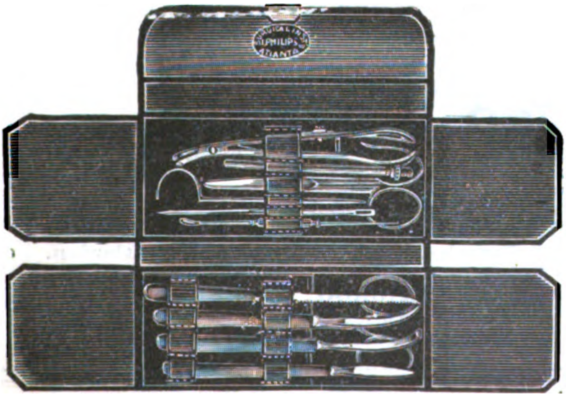

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